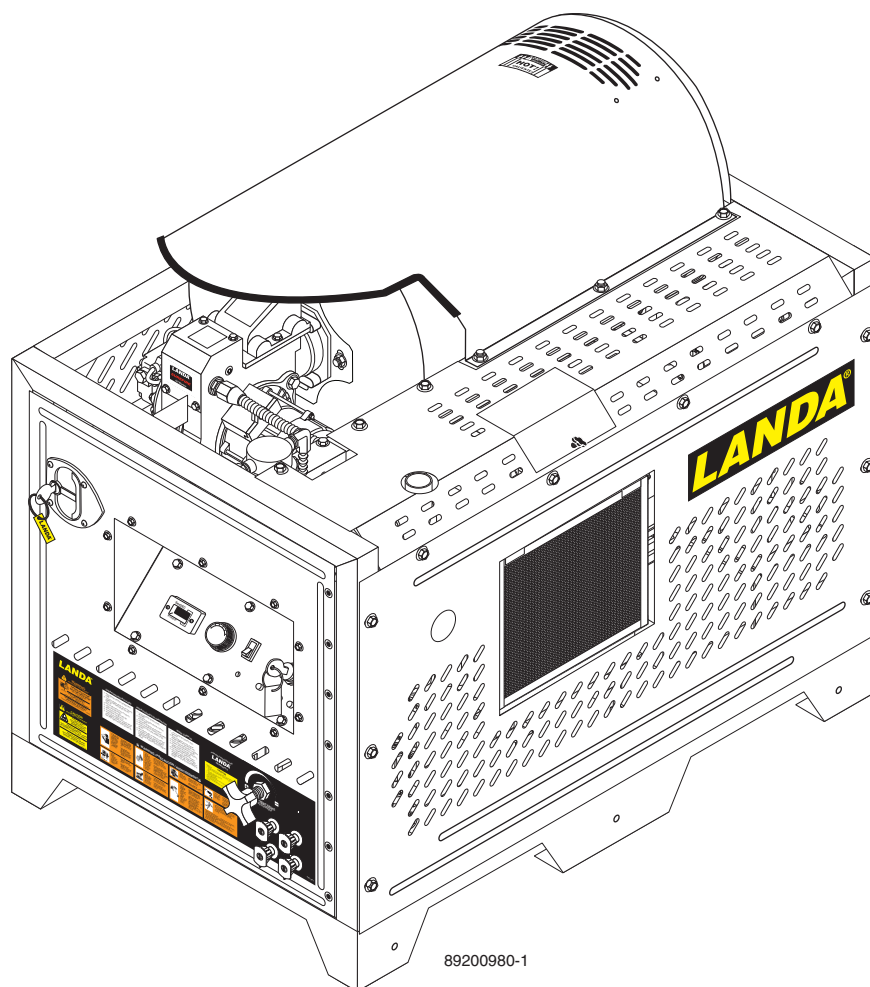


LANDA® PDHW

SERVICE MANUAL

■ PDHW5-35624E	1.110-060.0	■ PDHW5-35624E/SS	1.110-061.0
■ PDHW5-35624E/G	1.110-062.0	■ PDHW5-35624E/G/SS	1.110-063.0



For technical assistance or the dealer nearest you,
consult our web page at www.landa.com

8.920-098.0

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Model Number _____

Serial Number _____

Date of Purchase _____

The model and serial numbers will be found on a decal attached to the pressure washer. You should record both serial number and date of purchase and keep in a safe place for future reference.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
LOW OPERATING PRESSURE	Faulty pressure gauge	Install new gauge.
	Insufficient water supply	Use larger supply hose; clean filter at water inlet.
	Old, worn or incorrect spray nozzle	Match nozzle number to machine and/or replace with new nozzle.
	Belt slippage	Tighten or replace; use correct belt.
	Plumbing or hose leak	Check plumbing system for leaks. Re-tape leaks with teflon tape.
	Faulty or mis-adjusted unloader valve	Adjust unloader for proper pressure. Install repair kit when needed.
	Worn packing in pump	Install new packing kit.
	Fouled or dirty inlet or discharge valves in pump	Clean inlet and discharge valves.
	Worn inlet or discharge valves	Replace with valve kit.
	Obstruction in spray nozzle	Remove obstruction.
	Leaking pressure control valve	Rebuild or replace as needed.
	Slow engine RPM	Set engine speed at proper specifications.
	Pump sucking air	Check water supply and possibility of air seepage.
	Valves sticking	Check and clean or replace if necessary.
	Unloader valve seat faulty	Check and replace if necessary.
BURNER WILL NOT LIGHT	Little or no fuel	Fill tank with fuel.
	Improper fuel or water in fuel	Drain fuel tank and fill with proper fuel.
	Clogged fuel line	Clean or replace.
	Plugged fuel filter	Replace as needed.
	Mis-adjusted burner air bands	Readjust air bands for clean burn.
	Little or no fuel pressure from fuel pump	Increase fuel pressure to specification and/or replace fuel pump. Test with pressure gauge.
	Faulty burner transformer	Test transformer for proper arc between contacts. Replace as needed.
(continued on next page)	Disconnected or short in electrical wiring	All wire contacts should be clean and tight. No breaks in wire

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
BURNER WILL NOT LIGHT (continued from previous page)	Flex coupling slipping on fuel pump shaft or burner motor shaft	Replace if needed.
	On-Off switch defective	Check for electrical current reaching burner assembly with burner switch on.
	Heavy sooting on coil and burner can cause interruption of air flow and shorting of electrodes	Clean as required.
	Improper electrode setting	Check and reset according to diagram in Operator's Manual.
	Fuel not reaching combustion chamber	Check fuel pump for proper flow. Check solenoid flow switch on machines with spray gun control, for proper on-off fuel flow control.
	Clogged burner nozzle	Clean as required.
	Thermostat faulty or slow engine speed	Increase engine RPM to increase voltage.
	Flow switch malfunction	Remove, test for continuity and replace as needed.
	Flow solenoid malfunction	Replace if needed.
FLUCTUATING PRESSURE	Valves worn	Check and replace if necessary.
	Blockage in valve	Check and replace if necessary.
	Pump sucking air	Check water supply and air seepage at joints in suction line.
	Worn piston packing	Check and replace if necessary.
	Engine Altitude	The engine is preset for operation at altitudes below 1000 feet above sea level. If operated at higher altitudes, it may be necessary to adjust the engine. Contact your local authorized engine sales and service center for details.
MACHINE SMOKES	Improper fuel or water in fuel	Drain tank and replace contaminated fuel.
	Improper air adjustment	Readjust air bands on burner assembly.
	Low fuel pressure	Adjust fuel pump pressure to specifications.
	Plugged or dirty burner nozzle	Replace nozzle.
	Faulty burner nozzle spray pattern	Replace nozzle.
	Heavy accumulation of soot on coils and burner assembly	Remove coils and burner assembly, clean thoroughly.
	Misaligned electrode setting	Realign electrodes to specifications.
	Obstruction in smoke stack	Check for insulation blockage or other foreign objects.
	Low engine RPM	Increase RPM

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
LOW WATER TEMPERATURE	Improper fuel or water in fuel	Replace with clean and proper fuel.
	Low fuel pressure	Increase fuel pressure.
	Weak fuel pump	Check fuel pump pressure. Replace pump if needed.
	Fuel filter partially clogged	Replace as needed.
	Soot build-up on coils not allowing heat transfer	Clean coils.
	Improper burner nozzle	See specifications. (page 32)
WATER TEMPERATURE TOO HOT	Incoming water to machine warm or hot	Lower incoming water temperature.
	Fuel pump pressure too high	See specifications for proper fuel pressure.
	Fuel pump defective	Replace fuel pump.
	Detergent line sucking air	Tighten all clamps. Check detergent lines for holes
	Defective temperature switch	Replace.
	Incorrect fuel nozzle size	See specifications for proper fuel nozzle. (page 32)
	Insufficient water supplied	Check water G.P.M. to machine.
	Restricted water flow	Check nozzle for obstruction, proper size.
PUMP NOISY	Air in suction line	Check water supply and connections on suction line.
	Broken or weak inlet or discharge valve springs	Check and replace if necessary.
	Excessive matter in valves	Check and clean if necessary.
	Worn bearings	Check and replace if necessary.
PRESENCE OF WATER IN OIL	Oil seal worn	Check and replace if necessary.
	High humidity in air	Check and change oil twice as often.
WATER DRIPPING FROM UNDER PUMP	Piston packing worn	Check and replace if necessary.
	O-Ring plunger retainer worn	Check and replace if necessary.
	Cracked piston	Check and replace if necessary.
	Pump protector	Lower water supply pressure. Do not run with spray gun closed longer than 2 minutes.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
OIL DRIPPING	Oil seal worn	Check and replace if necessary.
EXCESSIVE VIBRATION IN DELIVERY LINE	Irregular functioning of the valves	Check and replace if necessary.
DETERGENT NOT DRAWING	Air leak	Tighten all clamps. Check detergent lines for holes.
	Restrictor in float tank is missing	Replace restrictor. Check for proper orifice in restrictor.
	Filter screen on detergent suction hose plugged	Clean or replace.
	Dried up detergent plugging metering valve	Disassemble and clean thoroughly
	High viscosity of detergent	Dilute detergent to specifications.
	Hole in detergent line(s)	Repair hole.
	Low detergent level	Add detergent, if needed.
PUMP RUNNING NORMALLY BUT PRESSURE LOW ON INSTALLATION	Pump sucking air	Check water supply and possibility of air seepage.
	Valves sticking	Check and clean or replace if necessary.
	Nozzle incorrectly sized	Check and replace if necessary (See serial plate for proper size).
	Unloader valve seat faulty	Check and replace if necessary.
	Worn piston packing	Check and replace if necessary.
BURNER MOTOR WILL NOT RUN	Fuel pump seized	Replace fuel pump.
	Burner fan loose or misaligned	Position correctly, tighten set screw.
	Defective control switch	Replace switch.
	Loose wire	Check and replace or tighten wiring.
	Defective burner motor	Replace motor.
RELIEF VALVE LEAKS WATER	Relief valve defective	Replace or repair.

MAINTENANCE & SERVICE

Check List:

1. Check to see that water pump is properly lubricated.
2. Follow winterizing instructions to prevent freeze damage to pump and coils.
3. Always neutralize and flush detergent from system after use.
4. If water is known to be high in mineral content, use a water softener on your water system, or de-scale as needed.
5. Do not allow acidic, caustic or abrasive fluids to be pumped through system.
6. Always use high grade quality cleaning products.
7. Never run pump dry for extended periods of time.
8. Use clean diesel. Clean or replace fuel filter every 300 hours or 6 months of operation. Avoid water contaminated fuel as it will damage the fuel pump.
9. If machine is operated with smoky or eye burning exhaust, coils will soot up, not letting water reach maximum operating temperature.
10. Never allow water to be sprayed on or near the engine or burner assembly or any electrical component.
11. Periodically delime coils as per instructions.
12. Check to see that engine is properly lubricated.

It is advisable, periodically, to visually inspect the burner. Check air inlet to make sure it is not clogged or blocked. Wipe off any oil spills and keep equipment clean and dry.

The flow of combustion and ventilating air to the burner must not be blocked or obstructed in any manner.

The area around the Landa washer should be kept clean and free of combustible materials, gasoline and other flammable vapors and liquids.

Unloader Valves:

Unloader valves are preset and tested at the factory before shipping. Tampering with the factory setting may cause personal injury and/or property damage, and will void the manufacturers warranty.

Winterizing Procedure:

Damage due to freezing is not covered by warranty. Adhere to the following cold weather procedures whenever the washer must be stored or operated outdoors under freezing conditions.

During winter months, when temperatures drop below 32°F, protecting your machine against freezing is necessary. Store the machine in a heated room. If this is not possible then mix a 50/50 solution of anti-freeze and water in the float tank. Turn the engine on to siphon the anti-freeze mixture through the machine. If com-

pressed air is available, an air fitting can be screwed into the float tank by removing the float tank strainer and fitting. Then inject the compressed air. Water will be blown out of the machine when the trigger on the spray gun is opened.

High Limit Hot Water Thermostat:

For safety, each machine is equipped with a temperature sensitive high limit control switch. In the event that the water should exceed its operating temperature, the high limit control will turn the burner off until the water cools then automatically reset itself. The thermostat sensor is located on the discharge side of the heating coil. The thermostat control dial is located on the control panel.

Pumps:

Use only SAE 10/40W non-detergent oil. Change oil after first 50 hours of use. Thereafter, change oil every three months or at 500 hour intervals. Oil level should be checked through use of dipstick found on top of pump, or the red dot visible through the oil gauge window. Oil should be maintained at that level.

Cleaning of Coils:

In alkaline water areas, lime deposits can accumulate rapidly inside the heating coil. This growth is increased by the extreme heat build up in the coil. The best preventative for liming conditions is to use high quality cleaning detergents. In areas where alkaline water is an extreme problem, periodic use of Landa Deliming Powder (Landa Part #8.718-911.0) will remove lime and other deposits before coil becomes plugged. (See Deliming instructions for use of Landa Deliming Powder.)

Deliming Coils:

Periodic flushing of coils or optional float tank is recommended.

Step 1: Fill a container with 4 gallons of water, then add 1 lb. of deliming powder. Mix thoroughly. Pour mixture into float tank.

Step 2: Remove wand assembly from spray gun and put spray gun into float tank. Secure the trigger on the spray gun into the open position.

Step 3: Turn engine on, allowing solution to be pumped through coils back into the float tank. The solution should be allowed to circulate 2-4 hours or until the color changes.

MAINTENANCE & SERVICE

Step 4: After circulating solution, flush the entire system with fresh water. Clean out float tank and then reinstall wand assembly to spray gun.

Removal of Soot and Heating Coil:

In the heating process, fuel residue in the form of soot deposits may develop between the heating coil pipe and block air flow which will affect burner combustion. When soot has been detected on visual observation, the soot on the coil must be washed off after following the coil removal steps (See Coil Removal on page 17).

Rupture Disk:

If pressure from pump or thermal expansion should exceed safe limits, the rupture disk will burst allowing high pressure to be discharged through hose to ground. When disk ruptures it will need to be replaced. Torque new rupture disk to 35 ft. lbs.

Fuel:

Diesel fuel must be clean, fresh, meet fuel specifications and be sourced from a known and reputable supplier. Clean, fresh and properly specified diesel fuel will provide assurances of maximum engine performance and maximum fuel injection system longevity. The use of out-of-spec, dirty or questionable quality diesel fuel will result in engine performance and start ability problems as well as reductions in engine and fuel injection system life.

Use clean fuel oil that is not contaminated with water and debris. Replace fuel filter and drain tank every 100 hours of operation.

All burner combustion system designs are geared toward the use of commercial grade diesel fuels. As such, use of fuels other than those designated "DF", i.e. DF2 (No. 2 Diesel Fuel), will result in degradation of performance and/or reduction in component life. It is understood that applications in certain situations require the use of fuels other than No. 2 diesel fuel. See list of various fuels and comments pertaining to each.

Diesel engines are designed to operate on No. 2 diesel fuel. However, some geographical areas, change the diesel fuel supply depot to No. 1 diesel fuel in the winter months because of the col winter temperatures. No. 2 diesel fuel provides maximum viscosity and lubricity but can have "waxing" problems at lower temperatures. We expressly recommend the use of No. 2 diesel fuels when temperatures are at or above 14°F. We recommend that No. 1 diesel fuel be used when temperatures are at or below 14°F. The use of either EPA-high sulfur, off-highway diesel fuel or EPA-low sulfur, on-highway fuel for non-CARB certified engines is allowed. CARB certified engines must consume only EPA-low sulfur diesel fuels conforming to EPA 40 CFR 86-113-94.

We do not recommend the use of "heating oil", blended fuel/waste engine oil or low grade diesel fuel of any kind. The use of aviation fuels - JP4, JP5 or JP8 must be approved on an application basis and is not recommended for broad range commercial applications.

Fuel Control System:

This machine utilizes a fuel solenoid valve located on the fuel pump to control the flow of fuel to the combustion chamber. The solenoid, which is normally closed, is activated by a flow switch when water flows through it. When the operator releases the trigger on the spray gun, the flow of water through the flow switch stops, turning off the electrical current to the fuel solenoid.

The solenoid then closes, shutting off the supply of fuel to the combustion chamber. Controlling the flow of fuel in this way gives an instantaneous burn-or-no-burn situation, thereby eliminating high and low water temperatures and the combustion smoke normally associated with machines incorporating a spray gun. Periodic inspection, to insure that the fuel solenoid valve functions properly, is recommended. This can be done by operating the machine and checking to see that the burner is not firing when the spray gun is in the OFF position.

Fuel Pressure Adjustment:

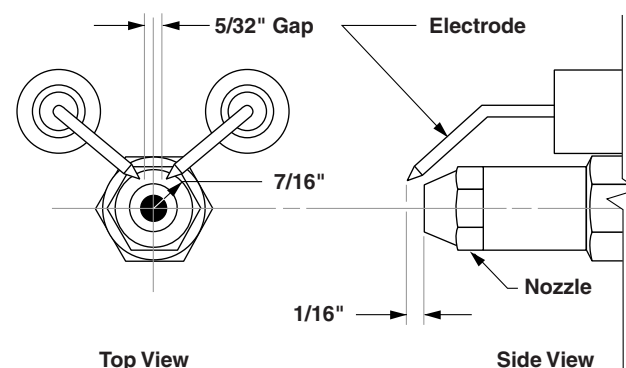
To control water temperature, adjust fuel pressure by turning the regulating pressure adjusting screw clockwise to increase, counterclockwise to decrease. Do not exceed 200 psi. **NOTE:** When changing fuel pump, a bypass plug must be installed in return port or fuel pump will not prime.

Burner Nozzle:

Keep the tip free of surface deposits by wiping it with a clean, solvent saturated cloth, being careful not to plug or enlarge the nozzle. For maximum efficiency, replace the nozzle each season.

Electrodes Setting:

(See Illustration Below)



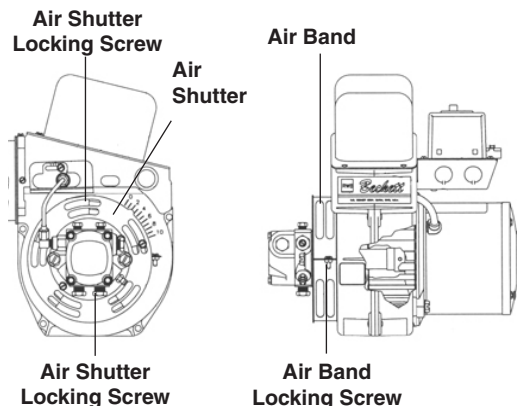
MAINTENANCE & SERVICE

Air Adjustment:

The oil burner on this machine is preset for operation at altitudes below 1000 feet. If operated at higher altitudes, it may be necessary to adjust the air band setting. Adjust air band for #1 or #2 smoke spot on the Bacharach scale. A one-time initial correction for your location will pay off in economy, performance, and extended service life. If a smoky or eye-burning exhaust is being emitted from the stack, two things should be checked. First, check the fuel to be certain that kerosene or No. 1 home heating fuel is being used. Next, check the air adjustment on the burner.

To Adjust Beckett Burner: Start machine and turn burner ON. Loosen two locking screws found in the air shutter openings (refer to illustration) and close air shutter until black smoke appears from burner exhaust vent. Note air band position. Next, slowly open the air shutter until white smoke just starts to appear. Turn air shutter halfway back to the black smoke position previously noted. Tighten locking screws.

If the desired position cannot be obtained using only the air shutter, lock the air shutter in as close a position



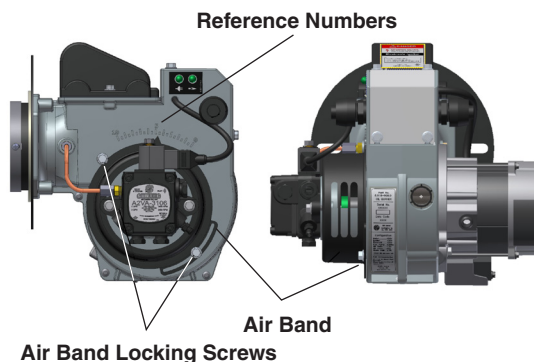
as can be obtained, then repeat the above procedure on the air band setting.

LANDA Sure Fire Oil Burner

Burner Air Adjustment: The oil burner on this machine is preset for operation at altitudes below 1000 feet. If operated at higher altitudes, it may be necessary to adjust the air band for a #1 or #2 smoke spot on the Bacharach scale.

To adjust, start machine and turn burner ON. Loosen two locking screws found on the air band and close air band until black smoke appears from burner exhaust vent. Note air band position. Next, slowly open the air band until white smoke just starts to appear. Turn air band halfway back to the previously noted position. Tighten locking screws.

Burner Air Adjustment



CAUTION: If white smoke appears from burner exhaust vent during start-up or operation, discontinue use and readjust air bands.

NOTE: If a flue is installed, have a professional serviceman adjust your burner for a #1 or #2 smoke spot on the Bacharach scale.

Coil Removal:

Removal of coil because of freeze breakage, or to clean soot from it can be done quickly and easily.

1. Disconnect hose from pump to inlet side of the coil.
2. Carefully disconnect the thermostat sensor making sure you do not crimp the capillary tube.
3. Remove burner assembly from combustion chamber.
4. Remove the 3-3/8" bolts from each side of coil and tank assembly (these bolts are used to fasten tank to chassis).
5. Remove fittings connected to the 1/2" pipe nipples from inlet and discharge sides of coil.
6. Remove top tank wrap, bend back insulation tabs and fold back blanket.
7. Remove bolts that hold down coil to bottom wrap.
8. Remove coil.
9. Replace or repair any insulation found to be torn or broken.
10. Remove insulation retainer plates.

Coil Reinstallation:

To reinstall new or cleaned coil, reverse steps 9 through 1.

PREVENTATIVE MAINTENANCE

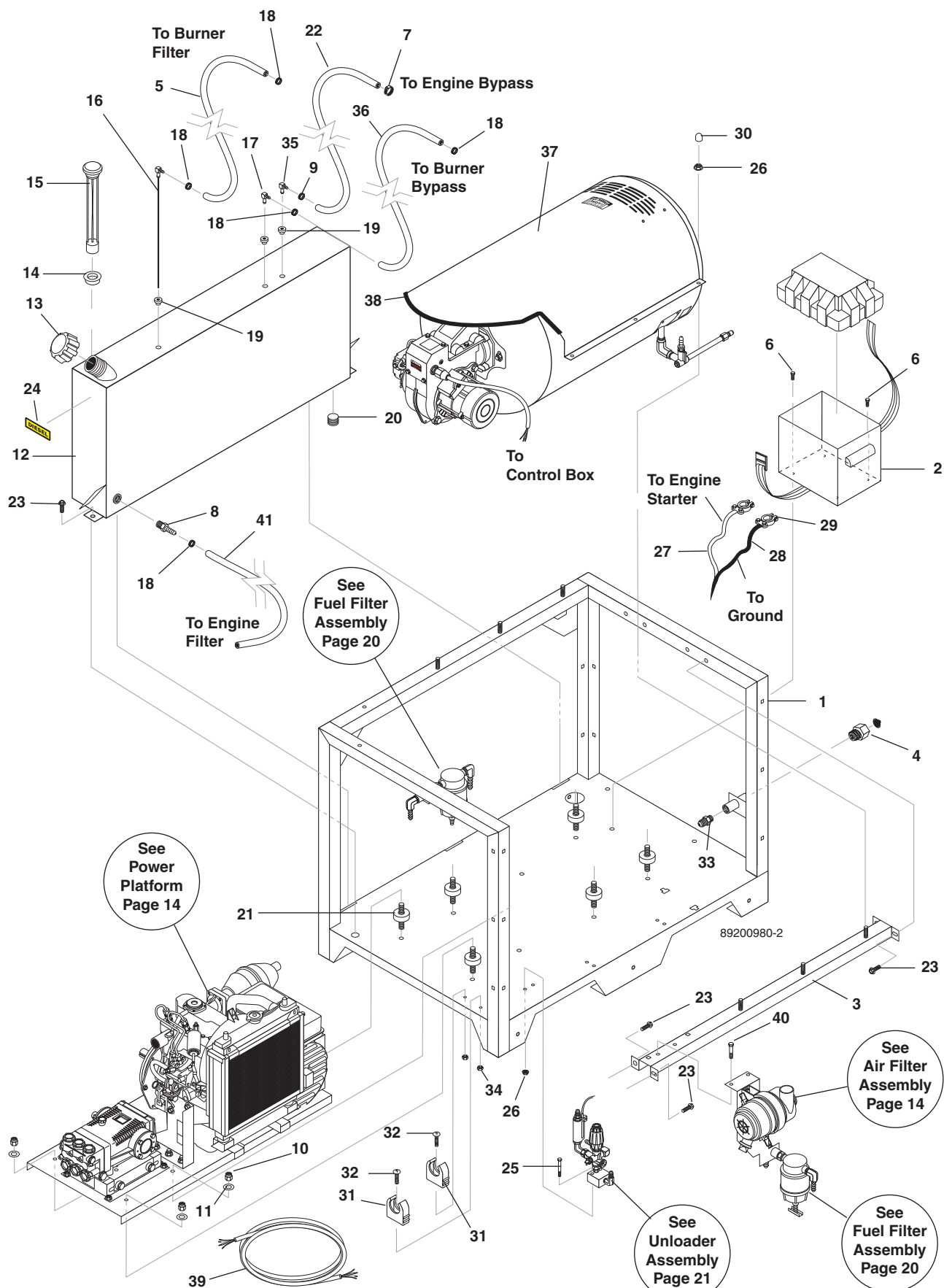
MAINTENANCE SCHEDULE		
Engine Oil SAE 10W-30 or 15W-40	Inspect	Daily
	Change	Every 100 hours
	Filter	Every 200 hours
Air Cleaner	Inspect	Every 50 hours or monthly
	Clean	Every 3 months
Battery Level		Check monthly
Engine Fuel Filter		300 hours or 6 months
Clean Fuel Tank(s)		Annually
Replace Fuel Lines		Annually
Pump Oil (Non-detergent SAE10/40W)	Inspect	Oil level daily
	Change	After first 50 hours, then every 500 hours or annually
Clean Burner Filter		Monthly (More often if fuel quality is poor)
Remove Burner Soot		Annually
Burner Adjustment/Cleaning		Annually
Replace Burner Nozzle		Annually
Descale Coil		Annually (More often if required)
Replace High Pressure Nozzle		Every 6 months
Replace Quick Connects		Annually
Clean Water Screen/Filter		Weekly
Replace HP Hose		Annually

OIL CHANGE RECORD

Check pump oil level before first use of your new Power Washer. **Change** pump oil after first 50 hours and every 3 months or 500 hours thereafter. Use SAE 10/40W non-detergent.

Date Oil Changed Month/Day/Year	No. of Operating Hours Since Last Oil Change	Brand Name and Type of Oil (See above)

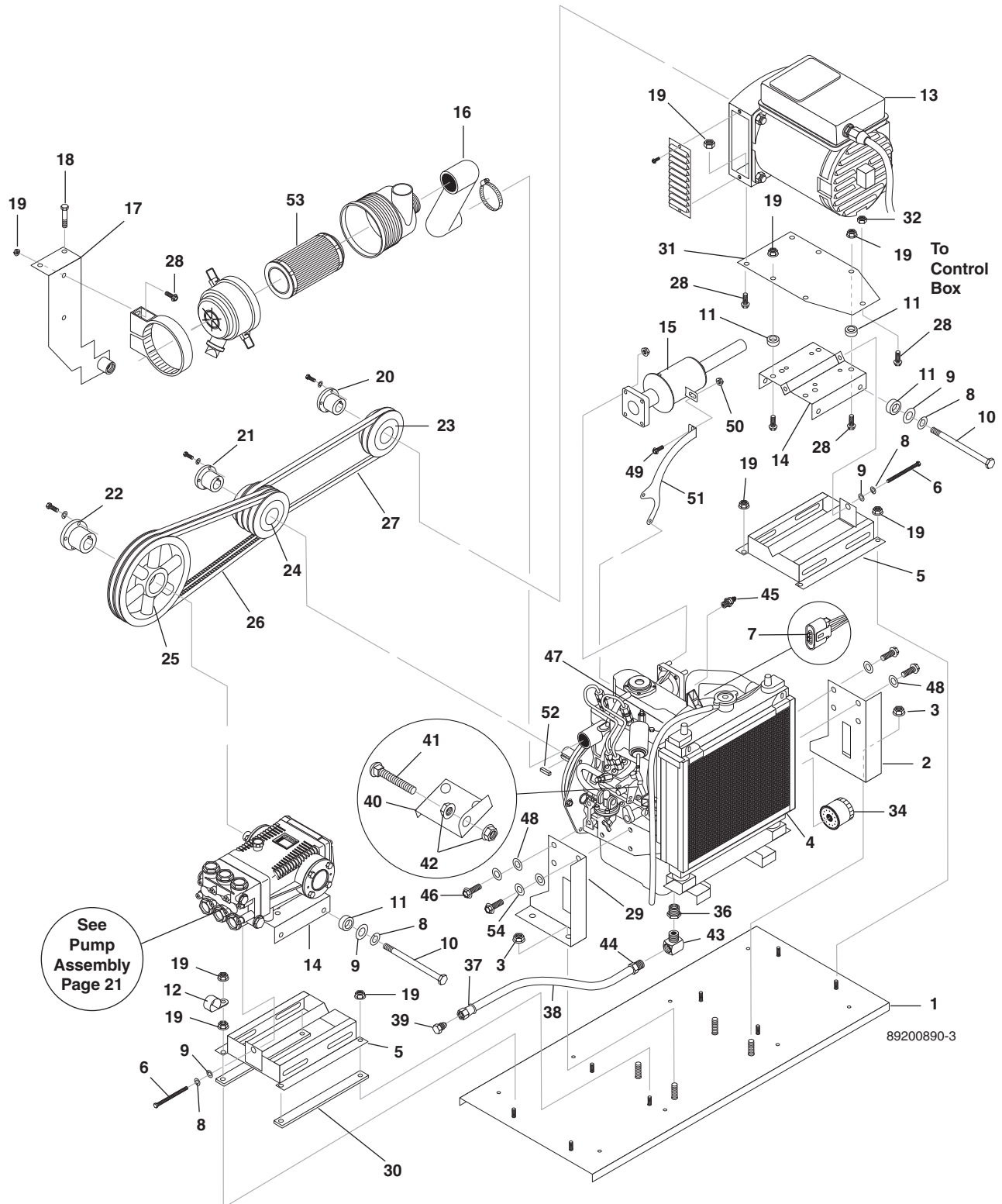
EXPLODED VIEW



EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.919-950.0	WLMT, Skid, PDHW	1	32	8.718-812.0	Screw, 10/32" X 3/4"	2
	8.919-951.0	WLMT, Skid, PDHW, SS	1	33	8.706-902.0	Nipple, 3/4" JIC x 1/2" NPT	1
2	8.706-600.0	Battery, Box, M-100, Large	1	34	9.802-696.0	Nut, 10/32" NF, Kep	2
3	8.920-106.0	WLMT, Support, Coil PDHW	1	35	8.706-500.0	Elbow, 3/16 Zinc	1
	8.920-173.0	WLMT, Support, Coil PDHW SS	1	36	9.802-254.0	Hose, 1/4" Push-on	39"
4	9.802-146.0	Swivel, 1/2" MP x 3/4" GHF w/Strainer	1	37	8.912-192.0	Wrap, Top, Stainless	1
5	9.802-254.0	Hose, 1/4" Push-On	28"	38	9.802-071.0	Trim, 750	33"
6	9.802-708.0	Screw, 5/16 x 3/4	2	39	8.920-286.0	Wiring Harness PDHW	1
7	8.709-069.0	Clamp, Screw	1	40	9.802-708.0	Screw, 5/16" x 3/4"	2
8	8.706-941.0	Hose Barb, 1/4" Barb x MPT, Brass	1		8.751-837.0	Whiz Loc Screw, 5/16" x 3/4"	2
9	8.709-116.0	Clamp, .40 -.48	2			Whiz Loc, SS	2
10	9.802-776.0	Nut, 5/16" ESNA, NC	6	41	9.802-254.0	Hose, 1/4" Push-On	36"
	9.802-777.0	Nut, 5/16" ESNA, NC, SS	6				
11	8.718-980.0	Washer, 5/16" Flat, SAE	6				
	9.802-805.0	Washer, 5/16" Flat, SAE, SS	6				
12	8.919-956.0	WLMT, Fuel Tank, PDHW	1				
	8.919-957.0	WLMT, Fuel Tank, PDHW, SS	1				
13	9.802-082.0	Cap, Fuel, Plastic H60-AV1	1				
14	9.803-604.0	Sleeve, Fuel Level/Switch	1				
15	8.750-574.0	Gauge, Fuel Level 19"	1				
16	8.751-448.0	Diptube Assy, Plastic, 19.50" Long	1				
17	9.802-054.0	Elbow, 1/4" Zinc	1				
18	6.390-126.0	Clamp, Hose, .46- .54 ST	5				
19	9.802-053.0	Bushing, Fuel Line, Rubber	3				
20	8.706-246.0	Plug, 1/4" Allen Counter Sunk	1				
21	8.751-816.0	Mount, Rubber	6				
22	9.802-255.0	Hose, 3/16 Push-on	48"				
23	9.802-767.0	Screw, 3/8" x 3/4" NC, Whiz Loc Flange	6				
	8.751-864.0	Screw, 3/8" x 3/4" NC, Whiz Loc Flange, SS	6				
24	8.932-960.0	Label, Diesel Fuel	1				
25	9.802-728.0	Bolt, 3/8"-16 x 2" HH Zinc	2				
	8.718-668.0	Bolt, 3/8"-16 x 2" HH SS	2				
26	9.802-781.0	Nut, 3/8" NC, Whiz Loc Flange	8				
	9.802-788.0	Nut, 3/8" NC, Whiz Loc Flange, SS	8				
27	9.802-503.0	Cable, Battery, 32" Red, 4 GA	1				
28	9.802-504.0	Cable, Battery, 36" Black, 4 GA	1				
29	8.716-608.0	Treminal, Battery, Marine	2				
30	8.750-435.0	Cap, Black Vinyl, .365 x 1/2"	6				
31	9.802-203.0	Clamp, 1/2" RO-CLIP, Kleinhuis	2				

POWER PLATFORM EXPLODED VIEW



POWER PLATFORM EXPLODED VIEW PARTS LIST

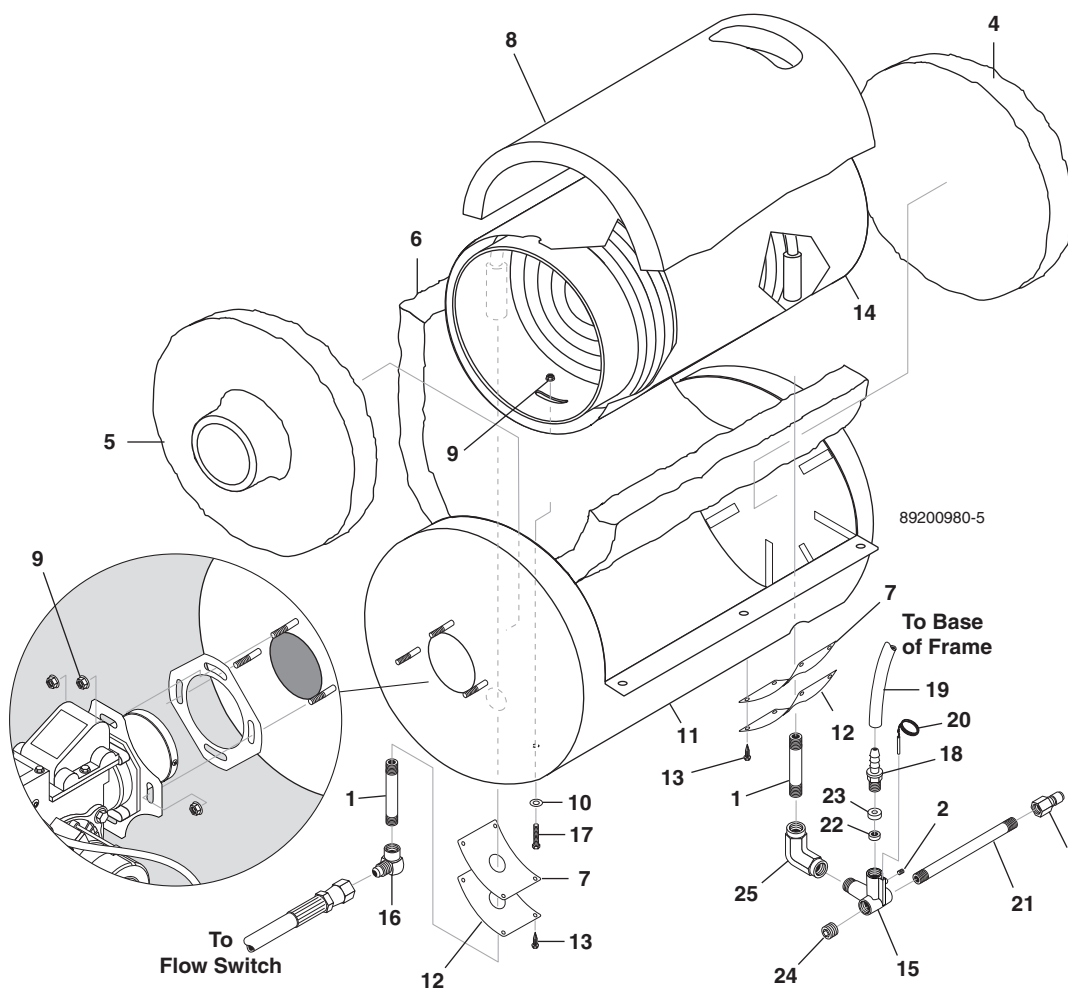
ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.919-952.0	Wlmt, Platform, Kubota	1	17	8.920-257.0	Wlmt, Bracket Air Cleaner Kubota	1
	8.919-953.0	Wlmt, Platform, Kubota, SS	1		8.920-292.0	Wlmt, Bracket Air Cleaner Kubota, SS	1
2	8.920-091.0	Bracket, Engine Kubota, Right	1	18	9.802-708.0	Screw, 5/16" x 3/4" NC, Whiz Loc Flange	8
	8.920-167.0	Bracket, Engine Kubota, Right SS	1			DC Models	8
3	8.718-830.0	Nut, 1/2", Flange, SS	4			AC Models	18
4	8.751-398.0	Engine, Kubota Z602-E3B-DEA-2	1		8.751-837.0	Screw, 5/16" x 3/4" NC, Whiz Loc Flange, SS	8
5	8.917-389.0	Wlmt, Pump Rail, Black	1			DC Models	8
		DC Models	1			AC Models	18
		AC Models	2	19	9.802-778.0	Nut, 5/16" Whiz Loc Flange	16
	8.920-163.0	Wlmt, Pump Rail, SS	1		8.718-887.0	Nut, 5/16" Whiz Loc Flange, SS	16
		DC Models	1	20	8.715-633.0	Bushing, H x 7/8, AC Models	1
		AC Models	2	21	9.802-405.0	Bushing, P2 x 1-1/8"	1
6	9.802-733.0	Bolt, 3/8" x 3-1/2", TAP, Grade 2"	1			AC Models	1
		DC Models	1		9.802-400.0	Bushing, H x 1-1/8"	1
		AC Models	2			DC Models	1
	8.718-682.0	Bolt, 3/8" x 3-1/2", TAP, Grade 2", SS	1	22	9.802-403.0	Bushing, H x 25 MM	1
		DC Models	1	23	9.802-378.0	Pulley, BK 34 H, AC Models	1
		AC Models	2	24	9.802-392.0	Pulley, 3 TB 34	1
7	8.751-414.0	Connector Kit, Alternator (Replacement Part)	1			AC Models	1
8	9.802-814.0	Washer, 3/8" Split Ring Lock, Zinc	3		9.802-382.0	Pulley, 2 BK 34 H	1
		DC Models	3			DC Models	1
		AC Models	6	25	9.802-391.0	Pulley, 2BK 100 H	1
	8.719-024.0	Washer, 3/8" Split Ring Lock, SS	3	26	8.715-702.0	Belt, BX 41	2
		DC Models	3	27	8.715-695.0	Belt, BX 34, AC Models	1
		AC Models	6	28	9.802-756.0	Screw, 5/16" x 1", Whiz Loc Flange	2
9	9.802-807.0	Washer, 3/8", Sae, Flat, Zinc	3			DC Models	2
		DC Models	3			AC Models	9
		AC Models	6		8.751-874.0	Screw, 5/16" x 1", Whiz Loc Flange, SS	2
	8.718-962.0	Washer, 3/8", Sae, Flat, SS	3			DC Models	2
		DC Models	3			AC Models	9
		AC Models	6	29	8.920-092.0	Bracket, Engine Kubota, Left	1
10	8.725-549.0	Bolt, 3/8" x 7-1/2" HH	2		8.920-168.0	Bracket, Engine Kubota, Left SS	1
		DC Models	2	30	8.920-242.0	Riser, Pump Rail	2
		AC Models	4		8.920-288.0	Riser, Pump Rail, SS	2
	8.751-705.0	Bolt, 3/8" x 7-1/2" HH, SS	2	31	8.920-239.0	Plate, Generator Mount, PDHW	1
		DC Models	2			AC Models	1
		AC Models	4		8.920-313.0	Plate, Generator Mount, PDHW, SS	1
11	8.719-047.0	Washer, Nylon, .281 Id x 1 OD x .25 THK	2	32	9.802-776.0	Nut, 5/16, ESNA, NC	1
		DC Models	2		8.920-777.0	Nut, 5/16, ESNA, NC, SS	1
		AC Models	8	33	9.802-503.0	▲ Cable, Battery, 32" Red, 4 GA	1
12	9.802-207.0	Clamp, Wire Tube	2	34	8.751-857.0	Filter, Oil, Kubota (Replacement Part)	1
13	8.751-395.0	Generator, Voltmaster AB30	1	35	9.802-504.0	▲ Cable, Battery, 36" Black, 4 GA	1
14	8.917-387.0	Mount, Pump Rail Wlmt	1	36	8.751-740.0	Bushing, 3/8" NPT x 22MM	1
		DC Models	1				
		AC Models	2				
	8.920-161.0	Mount, Pump Rail Wlmt, SS	1				
		DC Models	1				
		AC Models	2				
15	8.752-028.0	Muffler, Hapco, Kubota, Z602	1				
16	8.751-814.0	Hose, Air Intake Kubota Diesel	1				

POWER PLATFORM EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
37	9.802-151.0	Swivel, 1/2" Barb x 1/2" JIC	1
38	9.802-259.0	Hose, 1/2" Push-On	17"
39	9.802-126.0	Plug, 1/2" JIC	1
40	8.920-241.0	Plate, Throttle	1
41	8.718-608.0	Bolt, 1/4-20 x 1-1/2"	1
42	9.802-775.0	Nut, 1/4-20 Whiz	2
43	8.706-828.0	Elbow, 3/8" Street	1
44	8.707-019.0	Push-on 1/2" Barb x 3/8" NPT	1
45	8.751-826.0	Switch, Thermo (Replacement Part)	1
46	8.751-870.0	Screw, 10MM x 25MM	8
47	9.802-251.0	Hose, 1/4" Vinyl	24"
48	8.751-823.0	Washer, 7/16" Flat SS	8
49	9.802-767.0	Screw, 3/8" x 3/4" Whiz Loc	1
50	9.802-781.0	Nut, 3/8" Whiz Loc	1
51	8.920-369.0	Bracket, Muffler	1
52	9.802-673.0	Key Shaft	1
53	8.751-856.0	Filter, Air, Kubota (Replacement Part)	1
54	8.718-961.0	Washer, M10 Split Ring	8

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COIL ASSEMBLY EXPLODED VIEW

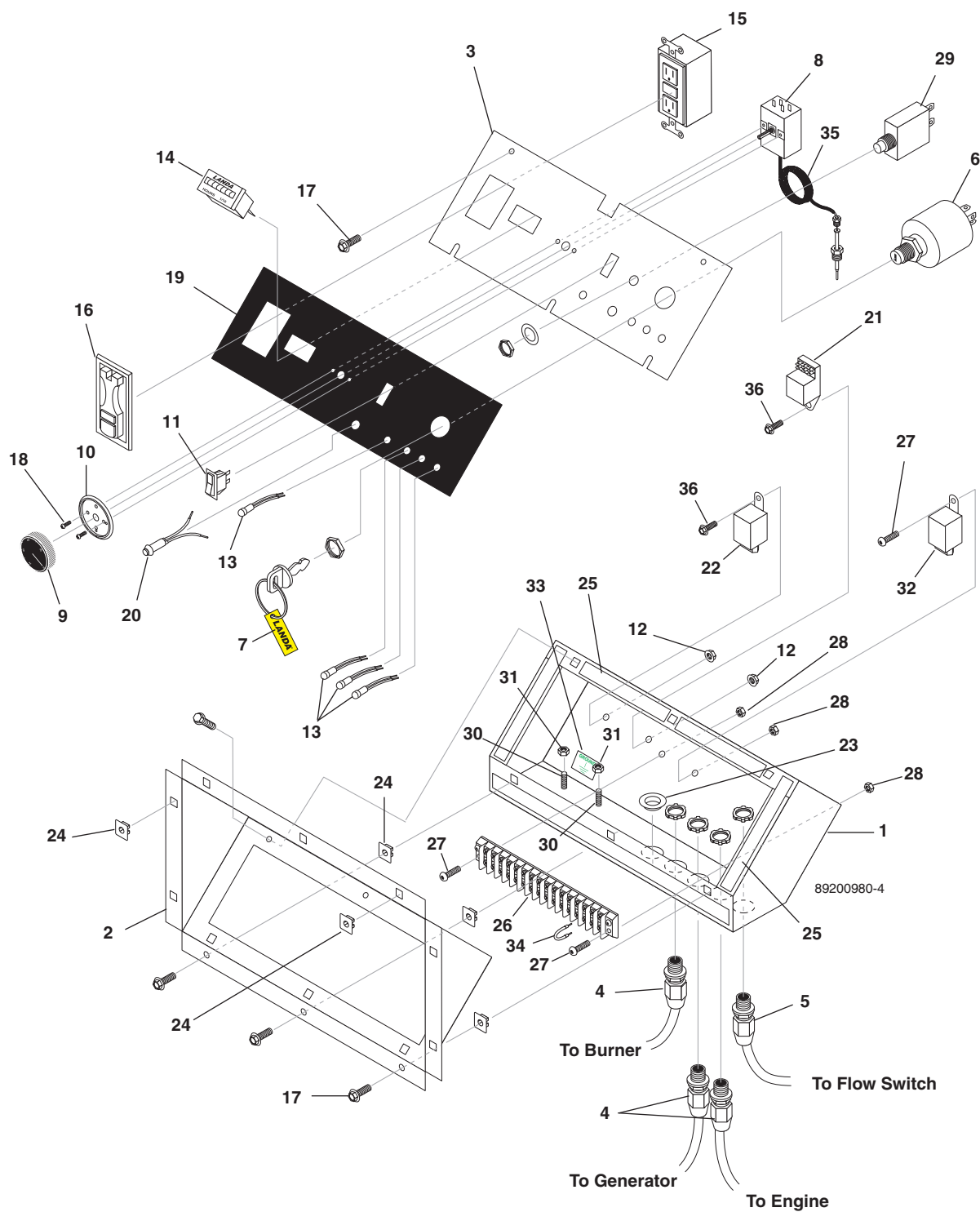


COIL ASSEMBLY EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-014.0	Nipple, 1/2" x 3" Galv. Sch 80	2
2	9.196-012.0	Screw, 10 x 24 x 1/4"	1
3	9.802-170.0	Nipple, 3/8" x 3/8" NPT ST	1
4	9.802-883.0	Insulation, Front Head, No Hole	1
5	9.802-894.0	Insulation, Burner Head, w/Hole	1
6	9.802-896.0	Insulation, Blanket, No Foil 24" x 57"	1
7	8.933-009.0	Gasket, Burner Plate	2
8	9.802-902.0	Insul/Blanket, Die Cut 28" x 24" x 1"	1
9	9.802-781.0	Nut, 3/8" Flange Whiz Loc, NC	5
10	9.802-807.0	Washer, Flat 3/8"	2
11	8.916-486.0	Wlmt, Bottom Wrap	1
	8.916-514.0	Wlmt, Bottom Wrap, SS	1
12	9.803-132.0	Insulation Retainer Plate	2
	8.920-290.0	Insulation Retainer Plate, SS	2

ITEM	PART NO.	DESCRIPTION	QTY
13	9.802-797.0	Screw, SS #10 x 1/2 Hex Head Tek	8
14	8.912-239.0	Coil, Landa Dura, Sch 80 w/Aluminized Steel Wrap	1
15	9.149-003.0	Manifold Coil Outlet	1
16	9.802-043.0	Elbow, 1/2 JIC x 1/2 Fem 90°	1
17	9.802-727.0	Bolt, 3/8" x 1-3/4" Tap	2
18	8.707-019.0	Hose Barb 1/2 Barb x 3/8 NPT	1
19	9.802-259.0	Hose, 1/2" Push-on /FT	43"
20	8.750-095.0	Thermostat 120°C/240°F	1
21	8.725-553.0	Nipple, 3/8" x 8"	1
22	8.725-944.0	Rupture Disk 8000#	1
23	9.184-030.0	Spacer, Rupture Disk	1
24	8.706-248.0	Plug, 3/8" NPT	1
25	8.706-172.0	Elbow, 1/2" Female Steel	1

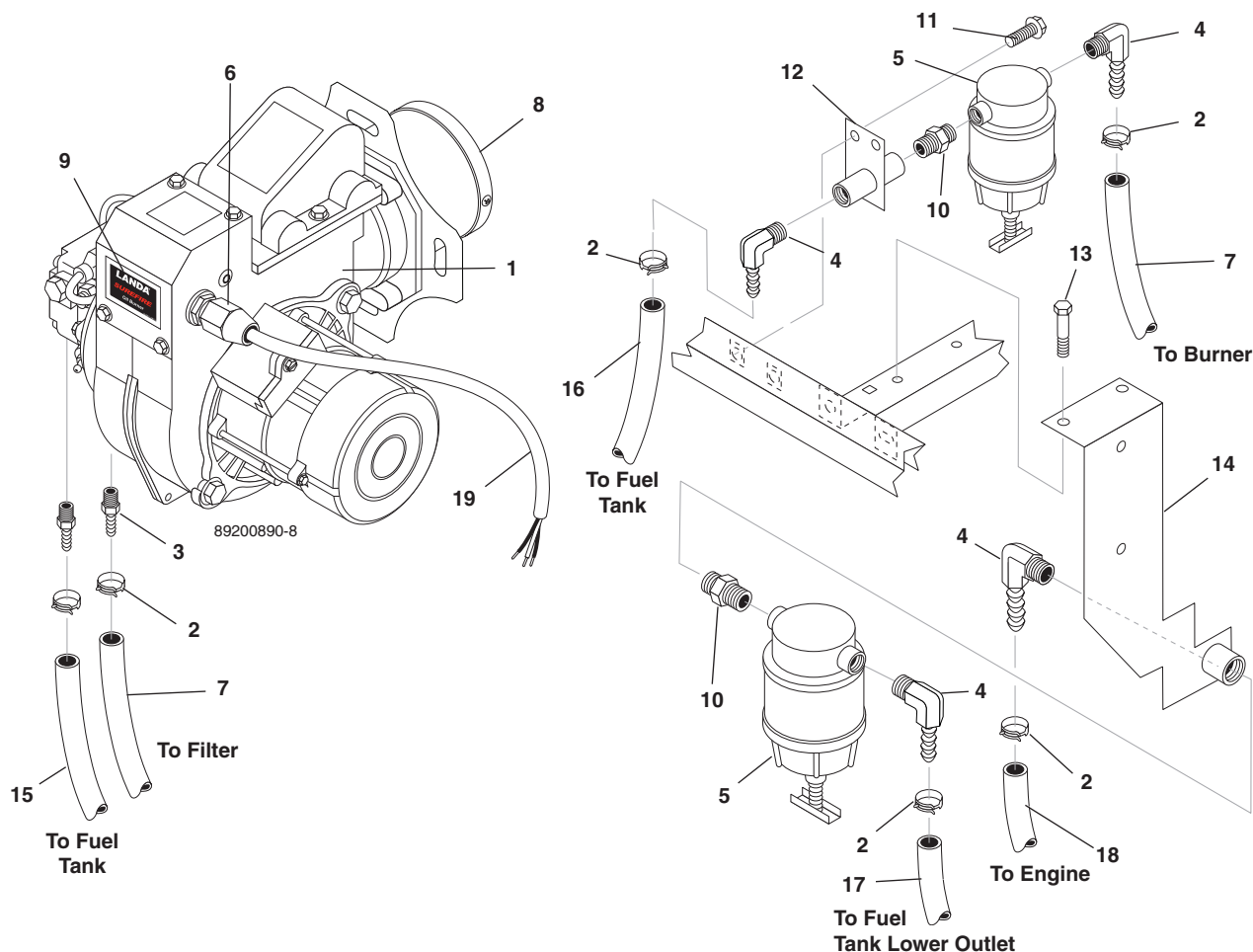
CONTROL BOX EXPLODED VIEW



CONTROL BOX EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.919-974.0	Control, Back, PDHW	1	29	9.802-485.0	Circuit Breaker (DC Models Only)	1
	8.919-975.0	Control, Back, PDHW, SS	1	30	9.802-762.0	Screw, 10/32" x 1-1/4"	2
2	8.919-976.0	Control, Front, PDHW	1		9.802-763.0	Screw, 10/32" x 1-1/4", SS	2
	8.919-977.0	Control, Front, PDHW, SS	1	31	9.802-695.0	Nut, 10/32" Kep	10
3	8.920-210.0	Panel, Control, PDHW AC	1		9.802-696.0	Nut, 10/32" Kep, SS	10
	8.920-182.0	Panel, Control, PDHW AC, SS	1	32	9.802-470.0	Relay 12V Picker (DC Models Only)	1
	8.920-181.0	Panel, Control, PDHW DC	1	33	9.800-040.0	Label, GND	1
	8.920-289.0	Panel, Control, PDHW DC, SS	1	34	9.802-494.0	Bar Jumper	4
4	9.802-514.0	Strain Relief, LT, STR, 1/2 NPT, .23-.45D	3	35	9.804-072.0	Conduit, Wire Cover	6ft
5	8.716-598.0	Strain Relief, .18-.31 (.51 Hole)	1	36	9.802-754.0	Screw, 1/4 x 1/2 NC Whiz Loc Flange	2
6	8.751-410.0	E02 Keyswitch (Replacement Part)	1		8.751-836.0	Screw, 1/4-20 x 1/2" Whiz Loc Flange SS	2
7	8.913-902.0	Key Ring, Landa	1	37	8.716-533.0	▲ Clamp, Tie Wrap	2
8	8.750-095.0	Thermostat, 120°C/240°F, 2 Meter Capillary	1			▲ Not Shown	
9	8.750-097.0	Knob, Thermostat 120°C/248°F	1				
10	8.712-190.0	Bezel, Plastic, Thermostat (915390)	1				
11	9.802-453.0	Switch, Curvette RA901VB-B-1-V.Carling.	1				
12	9.802-775.0	Nut, 1/4" Flange	2				
	8.718-817.0	Nut, 1/4" Flange, SS	2				
13	8.750-817.0	Light, Indicator, Green 14V	4				
14	9.802-283.0	Hour Meter, 24-240VAC 50/60HZ	1				
15	8.751-732.0	Receptacle, Electrical GFCI (AC Models Only)	1				
16	8.751-733.0	Cover, Electrical Receptacle (AC Models Only)	1				
17	8.750-246.0	Screw, 1/4" x 1/2" Whiz Loc Black	16				
	8.751-836.0	Screw, 1/4" x 1/2" Whiz Loc Flange, SS	16				
18	8.718-779.0	Screw, 4MM x 6 MM, Pan Head	2				
19	8.919-979.0	Label, Control Panel, PDHW	1				
20	8.750-819.0	Light, Indicator, Green 125V (AC Models Only)	1				
21	8.751-412.0	Timer, Lamp Quickglow Kubota (Replacement Part)	1				
22	8.751-413.0	Relay, Solenoid Kubota (Replacement Part)	1				
23	8.706-755.0	Bushing, 5/8" Snap	1				
24	9.802-074.0	Nut, 1/4" Nylon	16				
25	9.802-073.0	Weather, Stripping	88"				
26	9.802-493.0	Block, Terminal, 16 Pole	1				
27	9.802-749.0	Screw, 8/32" x 3/4" BHSOC,	3				
	8.718-746.0	Screw, 8/32" x 3/4" BHSOC CS, SS	3				
28	9.802-785.0	Nut, 8/32" Kep	3				
	8.718-866.0	Nut 8/32" Kep, SS	3				

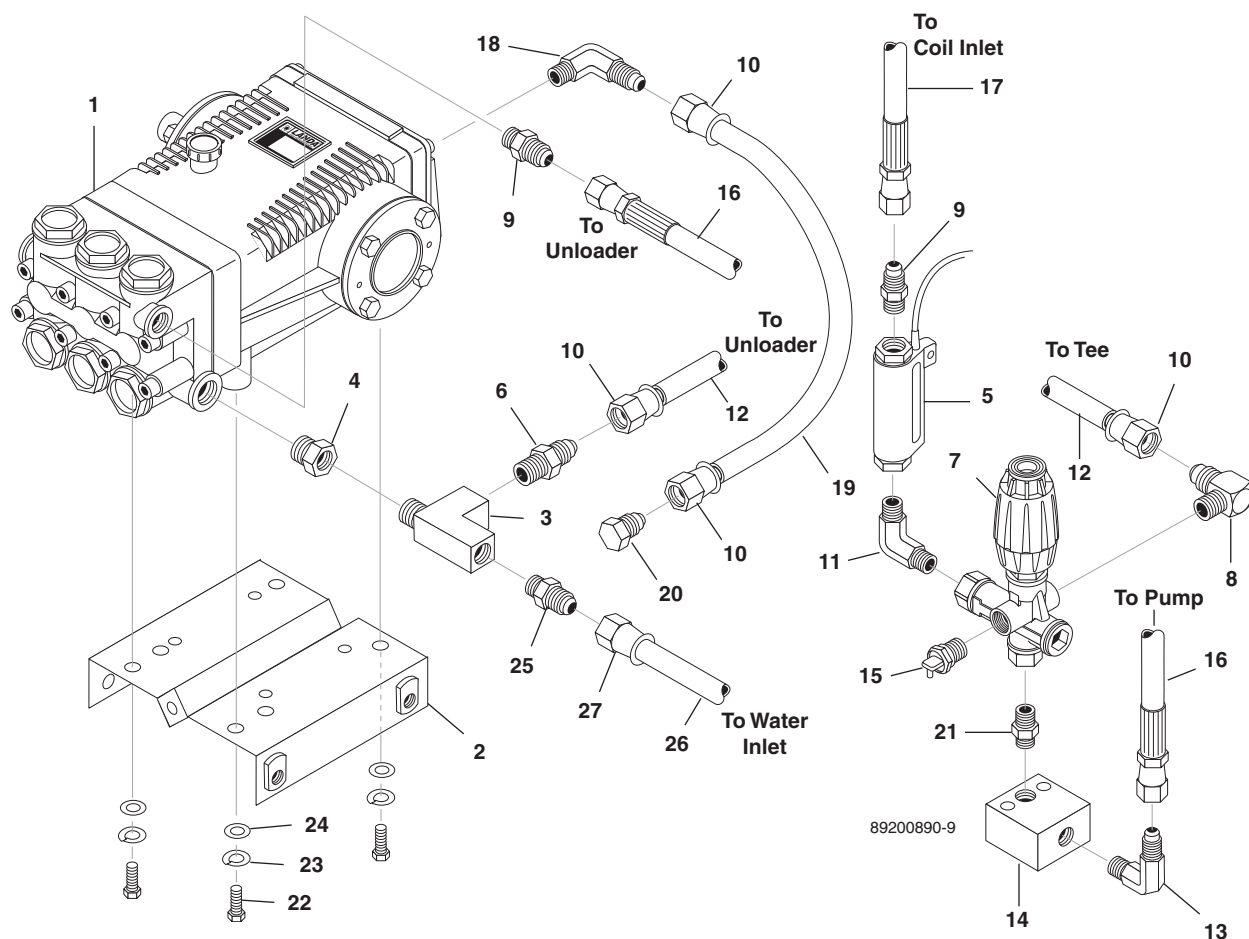
BURNER/FUEL FILTER ASSEMBLY EXPLODED VIEW



BURNER ASSEMBLY EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.750-777.0	Burner, Beckett SM, 120V Motor/SOL	1	12	8.920-245.0	Wlmt, Bracket, Fuel Filter PDHW	1
	8.918-919.0	Burner, KNA 12V HORZ F22 12-24V SOL ST	1		8.920-293.0	Wlmt, Bracket, Fuel Filter PDHW, SS	1
2	6.390-126.0	Clamp, Hose, .46-, .54 ST	6	13	9.802-708.0	Screw, 5/16" x 3/4" NC, Whiz Loc Flange	2
3	8.706-941.0	Hose Barb, 1/4" Barb x 1/4" MPT, Brass	2		8.751-837.0	Screw, 5/16" x 3/4" NC, Whiz Loc Flange, SS	2
4	8.706-958.0	Hose Barb, 1/4" Barb x 1/4" MPT, 90 °	4	14	8.920-257.0	Wlmt, Bracket, Air Filter, Kubota	1
5	8.709-158.0	Filter, Landa, Fuel Oil/H2O Separator	2		8.920-292.0	Wlmt, Bracket, Air Filter, Kubota, SS	1
6	9.802-514.0	Strain Relief, LT, STR, 1/2 NPT, .23-.45D	1	15	9.802-254.0	Hose, 1/4" Push-On, /Ft	39"
7	9.802-254.0	Hose, 1/4" Push-On	16"	16	9.802-254.0	Hose, 1/4" Push-On, /Ft	28"
8	8.717-366.0	Fuel Nozzle 2.50 x 90 B AC	1	17	9.802-254.0	Hose, 1/4" Push-On, /Ft	36"
	8.717-273.0	Fuel Nozzle 2.00 x 90 B DC	1	18	9.802-254.0	Hose, 1/4" Push-On, /Ft	15"
9	9.801-265.0	Label, Landa Surefire	1	19	9.802-424.0	Cord, 16/4 AC Models	60"
10	8.706-780.0	Nipple, 1/4" HEX	2		9.802-428.0	Cord, 12/3 DC Models	60"
11	9.802-767.0	Screw, 3/8" x 3/4" Whiz	2				
	8.751-864.0	Screw, 3/8" x 3/4" Whiz, SS	2				

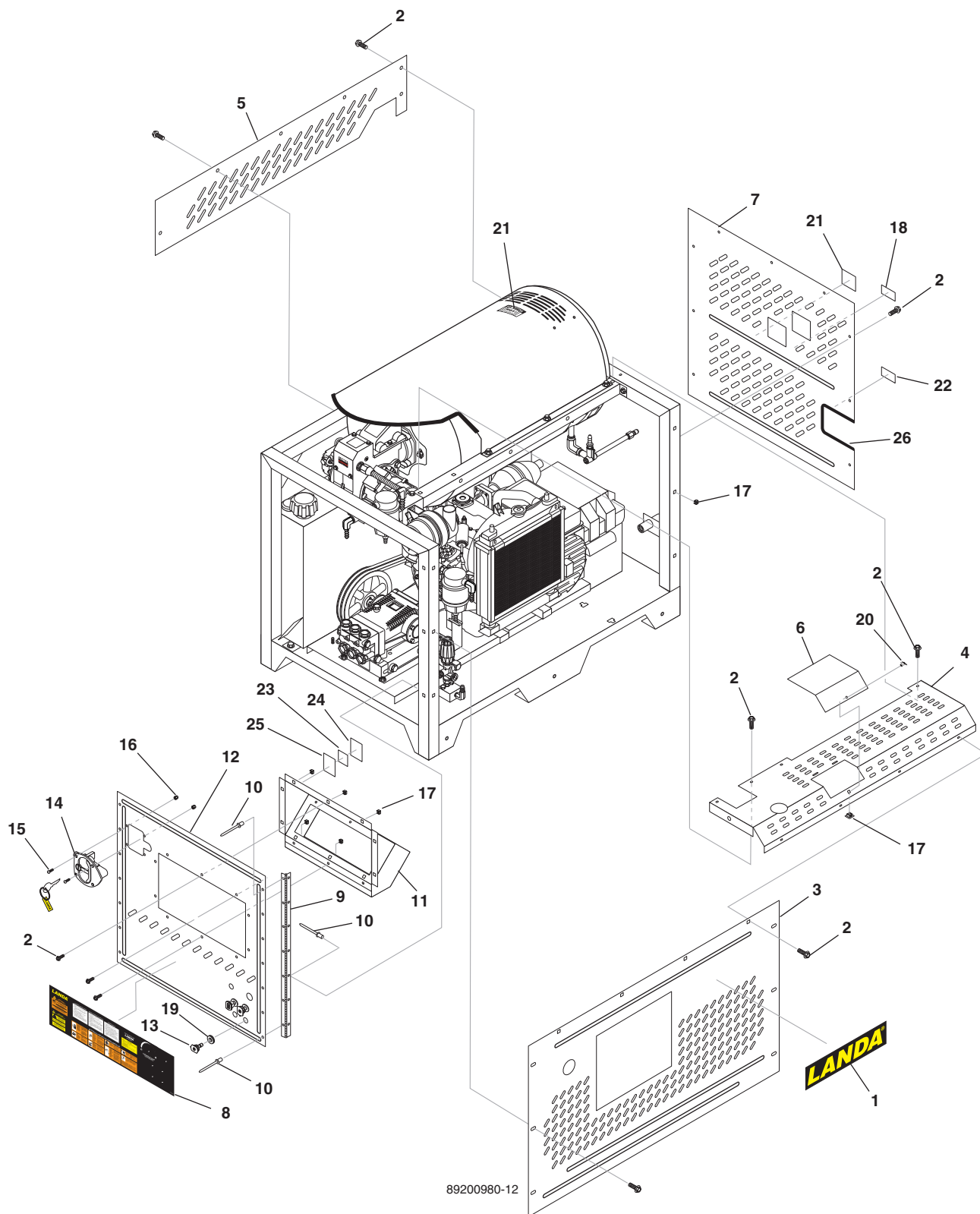
UNLOADER/PUMP ASSEMBLY EXPLODED VIEW



UNLOADER & PUMP ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	8.904-883.0	Pump, Landa LT6035L.1, 6@3500, 1540 RPM	1	13	9.802-039.0	Elbow 1/2" JIC x 3/8" MPT	1
2	8.917-387.0	Mount, Pump Rail W/mt	1	14	9.802-870.0	Block, Unloader, 3/8 x 3/8, 1.25, Steel	1
	8.920-161.0	Mount, Pump Rail W/mt, SS	1	15	8.707-254.0	Pump Protector , 3/8" 145°	1
3	8.706-860.0	Tee, 1/2" Street, Brass	1	16	8.918-210.0	Hose, 3/8" x 16" 2 Wire, Pressure Loop	1
4	8.706-984.0	Adapter, 1/2" FPT x 1/2" MPT, Brass	1	17	8.918-211.0	Hose, 3/8" x 40", 2 Wire, Pressure Loop	1
5	8.933-006.0	Switch, Flow MV 60	1	18	9.802-129.0	Elbow, 1/2" Jic x 3/8", 90°	1
6	9.802-128.0	Nipple, 1/2" JIC x 1/2" MPT Pipe Brass	1	19	9.802-259.0	Hose, 1/2" Push-On	15"
7	8.750-299.0	Unloader, VRT3, 8 GPM @4500 Psi	1	20	9.802-126.0	Plug, 1/2" Jic Flare, 639F-8	1
8	9.802-129.0	Elbow, 1/2" JIC x 3/8", 90° Brass	1	21	8.705-974.0	Nipple, 3/8" Hex Steel	1
9	9.802-036.0	Nipple, 1/2" JIC x 3/8" NPT, Steel	2	22	9.802-744.0	Bolt, 10MM x 20MM, HH Zinc	4
10	9.802-151.0	Swivel, 1/2" Barb x 1/2" Jic, FEM/Brass	4	23	8.718-961.0	Washer, M10 Splt Rng Lck 8.8 CLSS Zinc PLTD	4
11	8.706-168.0	Elbow, 3/8" MPT-P/N-TF 3529 x 6	1	24	9.802-807.0	Washer, 3/8", SAE, Flat Zinc	4
12	9.802-259.0	Hose, 1/2" Push-On	11"	25	8.706-902.0	Nipple, 3/4" Jic x 1/2" Pipe	1
				26	9.802-261.0	Hose, 3/4" Push-On	48"
				27	9.802-152.0	Swivel, 3/4" SAE FEM, Push-On	2

CHASSIS ASSEMBLY EXPLODED VIEW

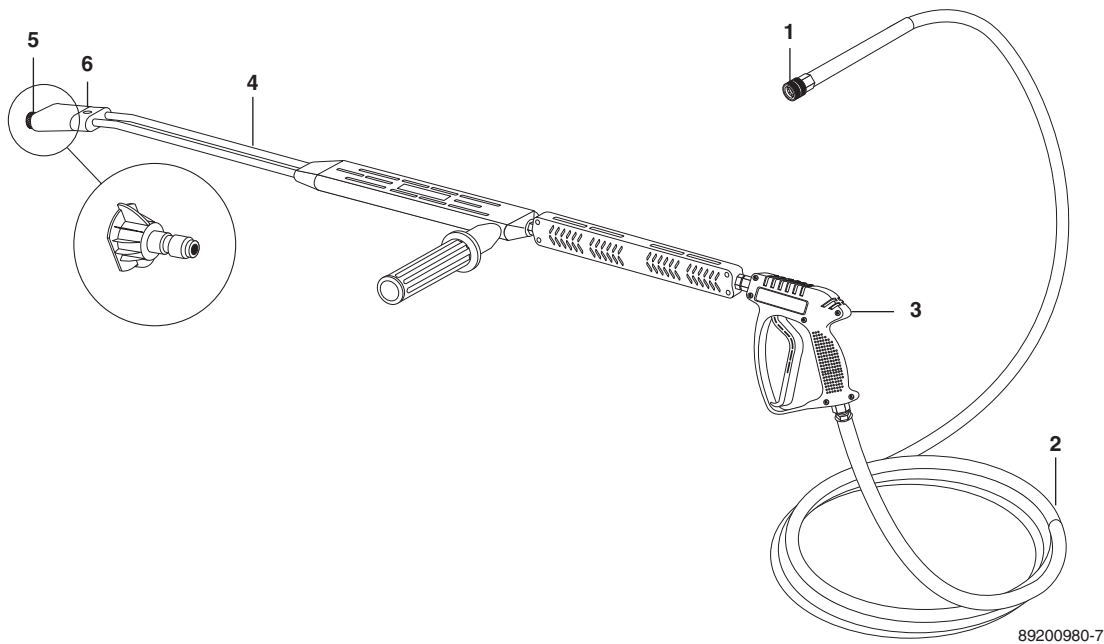


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CHASSIS ASSEMBLY EXPLODED PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	8.900-271.0	Label, Landa Logo, 16" x 4.75"	1
2	8.750-246.0	Screw, 1/4" x 1/2" NC, Whiz Loc Blk CAD	30
	8.751-836.0	Screw, 1/4" x 1/2" NC, Whiz Loc, SS	30
3	8.920-086.0	Panel, PDHW Front	1
	8.920-154.0	Panel, PDHW Front, SS	1
4	8.920-090.0	Panel, PDHW Top	1
	8.920-158.0	Panel, PDHW Top, SS	1
5	8.920-159.0	Panel, PDHW Back	1
	8.920-160.0	Panel, PDHW Back, SS	1
6	8.920-113.0	Cover, Radiator Cap	1
	8.920-291.0	Cover, Radiator Cap, SS	1
7	8.920-088.0	Panel, PDHW Right	1
	8.920-156.0	Panel, PDHW Right, SS	1
8	9.801-367.0	Label, Instructions - Warning, PDHW	1
9	8.920-243.0	Hinge, Piano 25.25" OAL, SS	1
10	8.751-055.0	Rivet, Aluminum 3/16" Dia. 062-.125 Grip	14
11	8.919-974.0	Control, Back, PDHW	1
	8.919-975.0	Control, Back, PDHW, SS	1
12	8.920-087.0	Panel, PDHW Left	1
	8.920-155.0	Panel, PDHW Left, SS	1
13	8.712-353.0	Nozzle, SAQCMEG 0005, Red	1
	8.712-354.0	Nozzle, SAQCMEG 1505, Yellow	1
	8.712-355.0	Nozzle, SAQCMEG 2505, Green	1
	8.712-356.0	Nozzle, SAQCMEG 4005, White	1
14	8.751-128.0	Handle, Locking, Vector T HNDL	1
15	8.718-813.0	Screw, 10/32 x 1/2 BH SOC, SS	4
16	8.718-860.0	Nut, 10/32", ESNA, SS"	4
17	9.802-074.0	Nut, 1/4" Square Head Grommet, Nylon	31
18	9.800-021.0	Label, Hot Water	1
19	9.802-064.0	Grommet, Rubber, Nozzle Holder	4
20	9.802-746.0	Screw, 1/4-20 x 1/2", Thumb	1
21	9.800-006.0	Label, Hot	1
22	9.800-020.0	Label, Cold Water Inlet	1
23		Serial Plate	1
24	9.800-034.0	Label, Clear Lexan	1
25	8.932-968.0	Label, Intended for Outdoor Use	1
26	9.802-071.0	Trim, 750	12"

HOSE & SPRAY GUN ASSEMBLY



HOSE & SPRAY GUN ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-166.0	Coupler, 3/8" Female	1	4	83-SSVPKIT	▲ Repair Kit, AL Stainless Seat	1
	9.802-100.0	▲ O-Ring, 3/8", Replacement Only	1	5	9.802-165.0	Coupler, 1/4" Male	1
2	8.917-057.0	Hose, 3/8" x 50'	1		9.802-096.0	▲ O-Ring, Replacement Only	1
3	8.751-234.0	Gun, Shut-Off, Landa, 5000 PSI, 10.5 GPM	1	6	9.802-286.0	▲ Nozzle, 1/8" Soap, Brass	1
4	8.711-308.0	VP Wand w/Coupler, Soap Nozzle	1			▲ Not Shown	

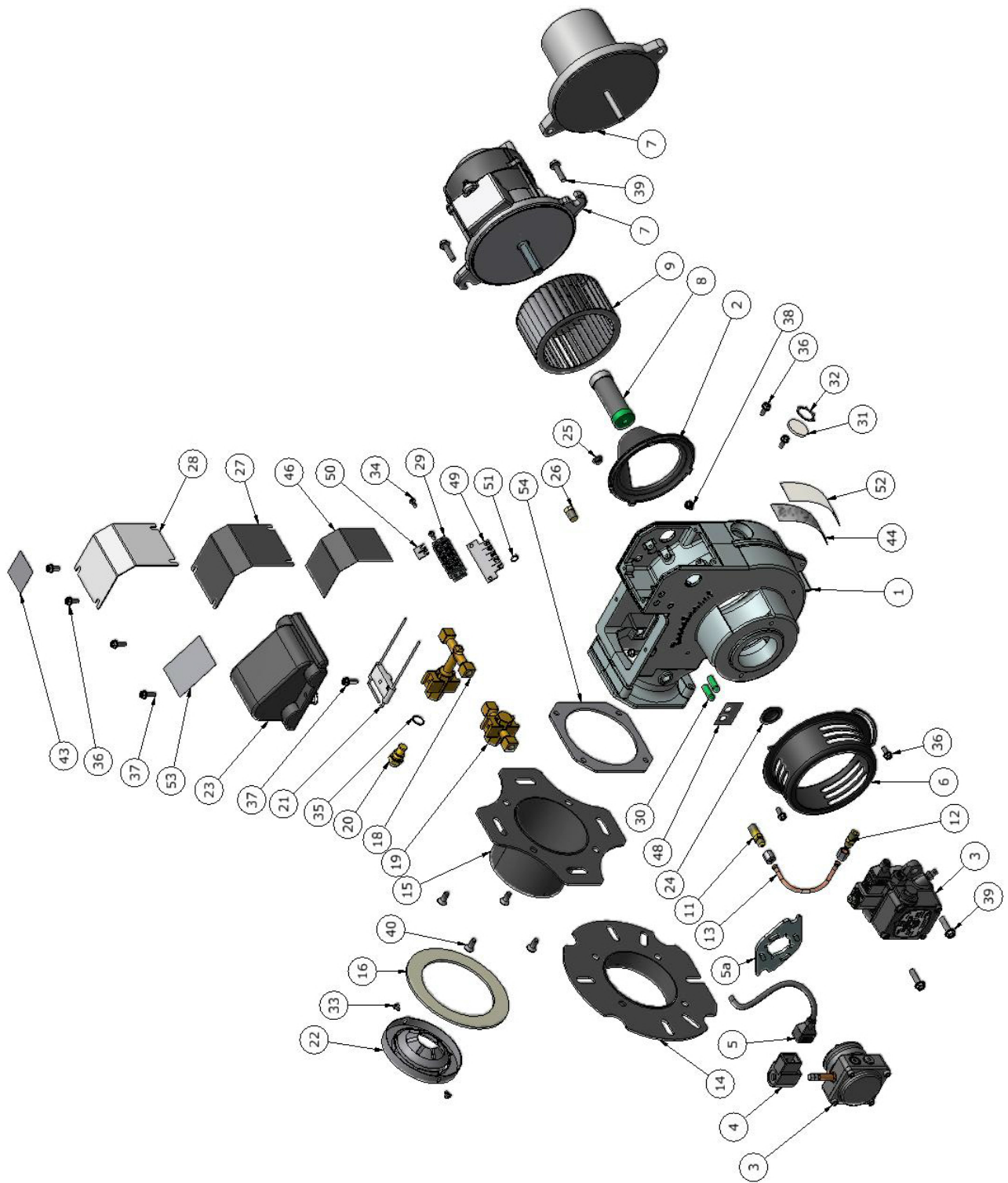
SPECIFICATIONS

LANDA BURNER SPECIFICATIONS

Model Number	Burner Assy No.	Fuel Nozzle	Transformer	Burner Motor	Fuel/Pump Solenoid/Coil	Electrode	Fuel Solenoid/Coil
1.110-060.0	8.918-919.0	8.717-273.0	8.919-116.0	8.751-074.0	8.100-794.0	8.751-342.0	8.700-794.0
1.110-061.0	8.918-919.0	8.717-273.0	8.919-116.0	8.751-074.0	8.700-794.0	8.751-342.0	8.751-794.0
1.110-062.0	8.750-777.0	8.717-366.0	9.803-060.0	9.803-056.0	9.802-650.0	8.704-110.0	9.802-640.0
1.110-063.0	8.750-777.0	8.717-366.0	9.803-060.0	9.803-056.0	9.802-650.0	8.704-110.0	9.802-640.0

LANDA Sure Fire Replacement Parts

For best performance specify genuine Sure Fire replacement parts



LANDA Sure Fire Replacement Parts

For best performance specify genuine Sure Fire replacement parts

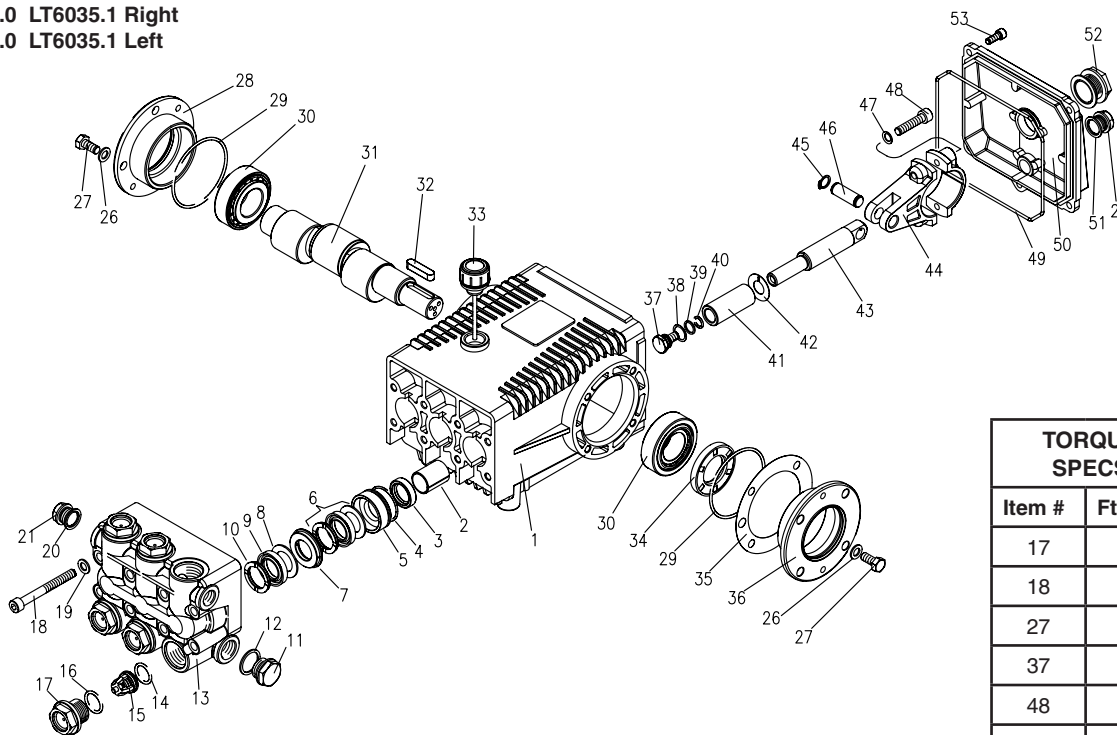
Item #	Part #	Description	Qty
25	8.750-830.0	PLUG, HOLE 0.285 PLASTIC	1
26	8.751-134.0	PLUG, 1/8" NPT x HEX SHOULDER	1
27	8.918-454.0	GASKET, JUNCTION BOX	1
28	8.750-542.0	COVER, JUNCTION BOX	1
29	8.750-116.0	BLOCK, TERMINAL, 5 POLE	1
30	8.750-817.0	LIGHT, INDICATOR, GREEN 14V	2
30	8.750-818.0	LIGHT, INDICATOR, GREEN 28V	1
30	8.750-819.0	LIGHT, INDICATOR, GREEN 125V	1
30	8.750-820.0	LIGHT, INDICATOR, GREEN 250V	1
31	8.750-784.0	SITE GLASS	1
32	8.750-785.0	RING, PUSH ON INTERNAL, 1305-112	1
33	8.733-001.0	SCREW, 8 x 1/4" HI LOW THREAD CUT, PPH	2
34	8.718-762.0	SCREW, 8-32 X 1/2", MPH RDH PL	2
35	8.752-137.0	WASHER, COPPER	1
36	8.718-810.0	SCREW, 10/32 x 1/2", WHIZ LOC FLANGE	6
37	8.750-770.0	SCREW, 10/32 x 5/8", WHIZ LOC FLANGE	3
38	8.750-816.0	SCREW, 10/32 X 1/4" GROUNDING	1
39	8.750-768.0	SCREW, 1/4-20 x 1", WHIZ LOC FLANGE	4
40	8.750-771.0	SCREW, 1/4-20 X 1/2", PHIL FHMS	4
42	—	LABEL, BRAND NAME	1
43	9.801-268.0	LABEL, DISCONNECT POWER SUPPLY	1
44	—	LABEL, SERIAL PLATE	1
46	9.807-339.0	LABEL, WIRING DIAGRAM, BURNER 115V-115V	1
46	9.807-340.0	LABEL, WIRING DIAGRAM, BURNER 230V-230V	4
46	9.807-341.0	LABEL, WIRING DIAGRAM, BURNER 230V-115V	1
46	9.807-342.0	LABEL, WIRING DIAGRAM, BURNER 115V-24V	1
46	9.807-343.0	LABEL, WIRING DIAGRAM, BURNER 230V-24V	1
46	9.807-344.0	LABEL, WIRING DIAGRAM, BURNER 12VDC	1
48	9.801-274.0	LABEL, BURNER LIGHTS	1
49	8.919-105.0	PLATE, TERMINAL BLOCK NUMBERS	1
50	8.716-451.0	TERMINAL, JUMPER SPADE	1
51	9.802-510.0	CABLE, TIE, 4" BLACK	2
52	9.807-348.0	LABEL, CLEAR MYLAR	1
53	9.807-345.0	LABEL, IGNITER 120V	1
53	9.807-346.0	LABEL, IGNITER 230V	1
53	9.807-347.0	LABEL, IGNITOR 12VDC	1
54	8.751-354.0	GASKET, BURNER TUBE	1

Item #	Part #	Description	Qty
1	8.919-050.0	BURNER HOUSING ASSEMBLY	1
2	8.751-160.0	AIR GUIDE	
3	8.700-758.0	FUEL PUMP, SUNTEC A2VA-3106 12-24V SOL	1
3	8.700-759.0	FUEL PUMP, SUNTEC A2VA-3106 120V SOL	1
3	8.700-760.0	FUEL PUMP, SUNTEC A2VA-3106 230V SOL	1
3	8.753-000.0	FUEL PUMP, DANFOSS 071N1298	1
4	8.750-762.0	COIL, SOLENOID DANFOSS 230V	1
4	8.750-763.0	COIL, SOLENOID DANFOSS 115V	1
4	8.750-764.0	COIL, SOLENOID DANFOSS 12-24V	1
5	8.750-765.0	CABLE, SOLENOID COIL, DANFOSS	1
5a	8.750-783.0	MOUNTING KIT, FLANGE/HUB, DANFOSS	1
6	8.750-541.0	AIR BAND	1
7	8.750-517.0	MOTOR, 1/6 HP 115V 60Hz	1
7	8.750-518.0	MOTOR, 1/6 HP 230V 60Hz	1
7	8.751-074.0	MOTOR, 1/7 HP 12VDC AMETEK	1
8	8.750-543.0	COUPLING, FLEX, 1/2" x 5/16"	1
8	8.751-073.0	COUPLING, FLEX, 5/16" x 5/16"	1
9	8.750-520.0	FAN, 4.53" X 2.42", 1/2" BORE, F115-62S	1
9	8.751-072.0	FAN, 4.53" x 2.42" x .313 BORE, F115-62S	1
11	8.750-547.0	CONNECTOR, 37 DEG FLARE X 1/8" NPT, LONG	1
12	8.750-545.0	CONNECTOR, 37 DEG FLARE X 1/8" NPT	1
13	8.749-000.0	FUEL LINE ASSEMBLY	1
14	8.752-034.0	FLANGE, KNA BURNER, 1" TUBE	1
15	8.752-035.0	FLANGE, KNA BURNER, 3" TUBE	1
16	8.750-539.0	GASKET, FLANGE	1
18	8.750-526.0	GUN, ELECTRODE / NOZZLE, 3"	1
19	8.750-525.0	GUN, ELECTRODE / NOZZLE, 1"	1
20	Varies	NOZZLE, FUEL	1
21	8.750-778.0	ELECTRODE, IGNITION, AC	1
21	8.751-342.0	ELECTRODE, IGNITION, DC	1
22	8.750-779.0	CONE, AIR F4	1
22	8.750-782.0	CONE, AIR F6	1
22	8.750-780.0	CONE, AIR F12	1
22	8.750-781.0	CONE, AIR F22	1
23	8.919-114.0	IGNITOR, BURNER 120V	1
23	8.919-115.0	IGNITOR, BURNER 230V	1
23	8.919-116.0	IGNITOR, BURNER 12VDC	1
24	8.751-165.0	PLUG, HOLE 0.875 PLASTIC	1

LT.1 SERIES PUMP EXPLODED VIEW

8.904-869.0 LT4035.1 Right
 8.904-870.0 LT4035.1 Left
 8.904-871.0 LT4040.1 Right
 8.904-872.0 LT4040.1 Left
 8.904-874.0 LT5030.1 Right
 8.904-879.0 LT5030.1 Left
 8.904-881.0 LT6035.1 Right
 8.904-883.0 LT6035.1 Left

G3 Evolution



TORQUE SPECS

Item #	Ft.-Lbs.
17	75
18	45
27	18
37	10
48	30
53	7.6

LT.1 SERIES PUMP EXPLODED VIEW PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY
1	9.803-163.0	Crankcase	1
2	9.803-195.0	Plunger Guide	3
3*	See Kit	Plunger Oil Seal	3
4*	See Kit	O-Ring Ø1.78 x 31.47	3
5*	See Kit	"Pressure Ring, Brass	3
6*	See Kit	"U" Seal Low Pressure	3
7*	See Kit	Intermediate Ring, Brass	3
8*	See Kit	Support Ring, Teflon Bronze	3
9 *	See Kit	"U" Seal High Pressure	3
10*	See Kit	Support Ring	3
11	9.802-926.0	Brass Plug, 1/2"	1
12	9.803-199.0	Copper Washer 1/2"	1
13	9.802-933.0	Manifold Head	1
14*	See Kit	O-Ring Ø2.62 x 17.13	6
15*	See Kit	Valve Assembly	6
16*	See Kit	O-Ring Ø2.62 x 20.29	6
17	9.802-928.0	Valve Plug	6
18	9.802-943.0	Manifold Stud Bolt	8

ITEM	PART NO.	DESCRIPTION	QTY
19	9.802-890.0	Washer	8
20	9.803-198.0	Copper Washer 3/8"	1
21	9.802-925.0	Brass Plug 3/8"	1
26	9.802-884.0	Washer	8
27	9.802-944.0	Hexagonal Screw	8
28	9.803-182.0	Closed Bearing Housing	1
29	9.803-186.0	O-Ring Ø2.62 x 71.12	2
30	9.803-160.0	Roller Bearing, Tapered	2
31	9.803-148.0	Crankshaft (GT4040.1, 5030.1, 6035.1)	1
	9.803-149.0	Crankshaft (GT 4035.1)	
32	9.803-167.0	Crankshaft Key	1
33	9.802-923.0	Oil Dip Stick	1
34	9.803-139.0	Crankshaft Seal	1
35	9.803-177.0	Shim	2
36	9.803-181.0	Bearing Housing	1
37*	See Kit	Plunger Bolt	3
38*	See Kit	Copper Spacer	3

LT.1 SERIES PUMP PARTS LIST (CONT)

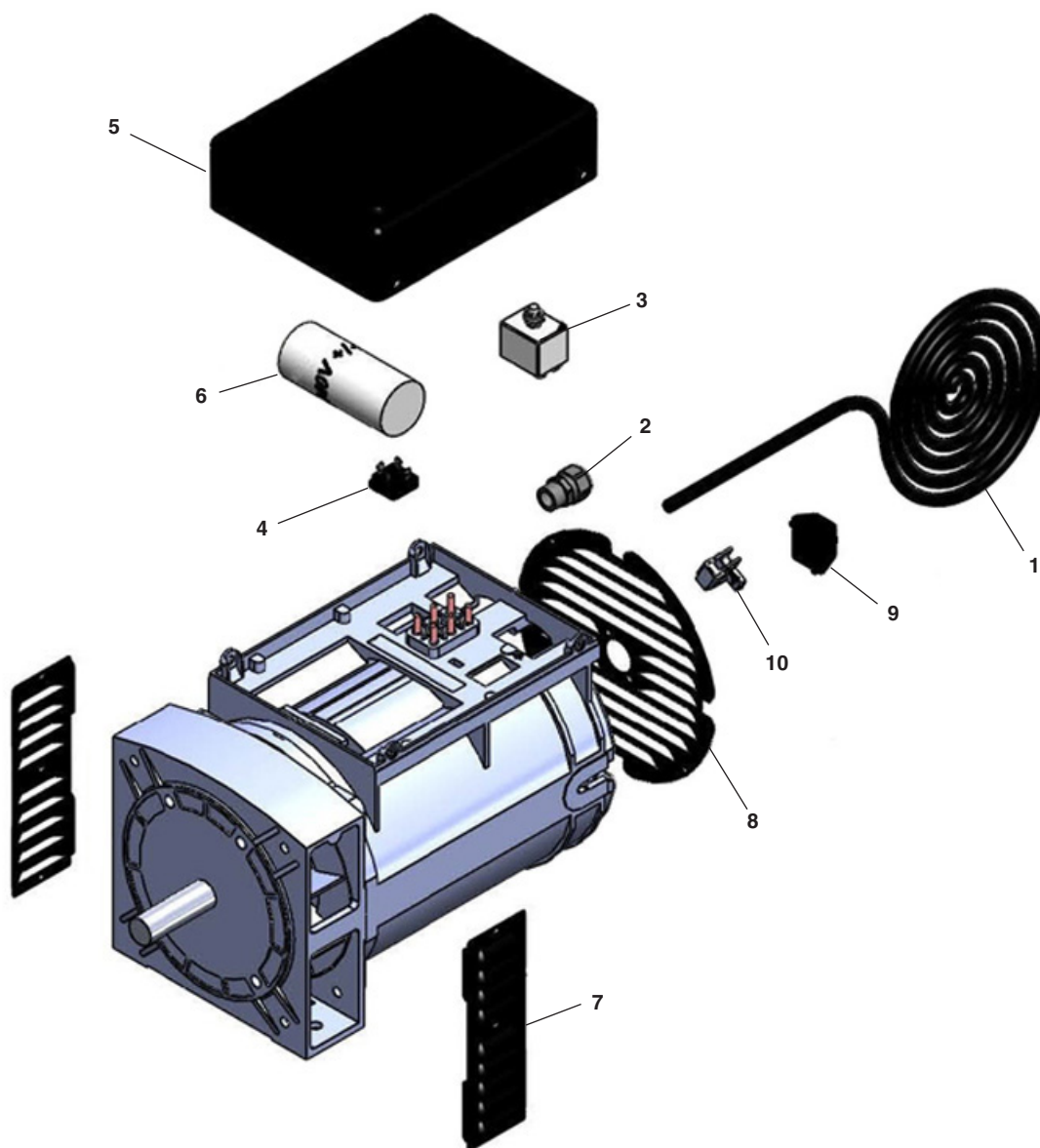
ITEM	PART NO.	DESCRIPTION	QTY
39*	See Kit	O-Ring Ø1.78 x10.82	3
40*	See Kit	Teflon Ring	3
41*	See Kit	Plunger	3
42*	See Kit	Copper Spacer	3
43	9.803-143.0	Plunger Rod	3
44	9.803-157.0	Connecting Rod	3
45	9.802-912.0	Snap Ring	6
46	9.802-915.0	Connecting Rod Pin	3
47	9.802-889.0	Spring Washer	6
48	9.802-937.0	Connecting Rod Screw	6
49	9.803-194.0	O-Ring Ø2.62 x 152.07	1
50	9.803-166.0	Crankcase Cover	1
51	9.803-197.0	Gasket, G3/8	1
52	9.803-202.0	Sight Glass G3/4	1
53	9.802-939.0	Cover Screw	5

* Part available in kit (See below)

REPAIR KIT NUMBER	8.916-488.0	8.916-487.0	8.916-322.0	8.916-323.0	9.802-607.0	9.802-611.0
KIT DESCRIPTION	Plunger "U" Seal 20mm LT-4040.1, LT-6035.1 LT-4035.1	Plunger "U" Seal 22mm LT-5030.1	"U" Seal Packing Assy 20mm LT-4040.1 LT-6035.1 LT-4035.1	"U" Seal Packing Assy 22mm LT-5030.1	Plunger 20mm LT-4040.1 LT-6035.1 LT-4035.1	Plunger 22mm LT-5030.1
ITEM NUMBERS INCLUDED	4, 6, 8, 9, 10	4, 6, 8, 9, 10	4, 5, 6, 7, 8, 9,10	4, 5, 6, 7, 8, 9,10	37, 38, 39, 40, 41, 42	37, 38, 39, 40, 41, 42
NUMBER OF CYLINDERS KIT WILL SERVICE	3	3	1	1	1	1

REPAIR KIT NUMBER	9.802-603.0	9.802-606.0
KIT DESCRIPTION	Complete Valve (all pumps)	Plunger Oil Seals (all pumps)
ITEM NUMBERS INCLUDED	14, 15, 16	3
NUMBER OF CYLINDERS KIT WILL SERVICE	6	3

AB30 VOLTMASTER GENERATOR



AB30 VOLTMASTER ASSEMBLY PARTS LIST

ITEM	PART NO.	DESCRIPTION	QTY	ITEM	PART NO.	DESCRIPTION	QTY
1	9.802-428.0	Cord, Serv, 12/3, SJOWA, /ft	4	6	8.752-181.0	Capacitor, 25MF, AB30	1
2	9.802-514.0	Strain Relief	1	7	8.752-182.0	Guard, Fan, AB30	7
3	8.752-178.0	Breaker, Circuit, 20A, AB30	1	8	8.752-183.0	Cover, End, AB30	1
4	8.752-179.0	Rectifier, Bridge, AB30	1	9	8.752-184.0	Cover, Rotor AB30	1
5	8.752-180.0	Cover, Electrical Box, AB30	1	10	8.752-185.0	Holder, Brush AB30	1

WATTAGE CHARTS

ELECTRIC MOTOR CHART Approximate Current Requirements					
HORSE POWER	RUNNING WATTS	STARTING WATTS			
		UNIVERSAL MOTOR (sm appliance)	INDUCTION MOTOR	CAPACITOR MOTOR	SPLIT PHASE MOTOR
1/6	275	400	600	850	1200
1/4	400	500	850	1050	1700
1/3	450	600	950	1350	1950
1/2	600	750	1300	1800	2600
3/4	850	1000	1900	2600	x
1	1000	1250	2300	3000	x
1-1/2	1600	1750	3200	4200	x
2	2000	2350	3900	5100	x
3	3000	x	5200	6800	x
5	4800	x	7500	9800	x

NOTE: For pumps, air compressors, air conditioners, inverters add at least 25% to starting current.

EXTENSION CORD CHART					
CONTINUOUS LOAD (use either Amps or Watts below)			MINIMUM GAUGE (AWG)		
AMPS	WATTS				
	@120 volts	@240 volts	0-50 ft	50-100 ft	100-150 ft
2	240	480	22	20	18
3	360	720	22	18	16
4	480	960	20	16	16
5	600	1200	18	16	14
6	720	1440	18	16	14
8	960	1920	16	14	12
10	1200	2400	16	12	12
12	1440	2880	16	12	10
14	1680	3660	14	12	10
16	1920	3840	14	10	10
18	2160	4320	14	10	8
20	2400	4800	12	10	8
22	2640	5280	12	10	8
25	3000	6000	12	10	6
30	3600	7200	10	8	6
35	4200	8400	10	8	4
40	4800	9600	8	6	2
50	6000	12000	6	4	2
60	7200	14400	4	2	

THE FORMULA FOR WATTAGE IS:

Volts x Amperage = Wattage

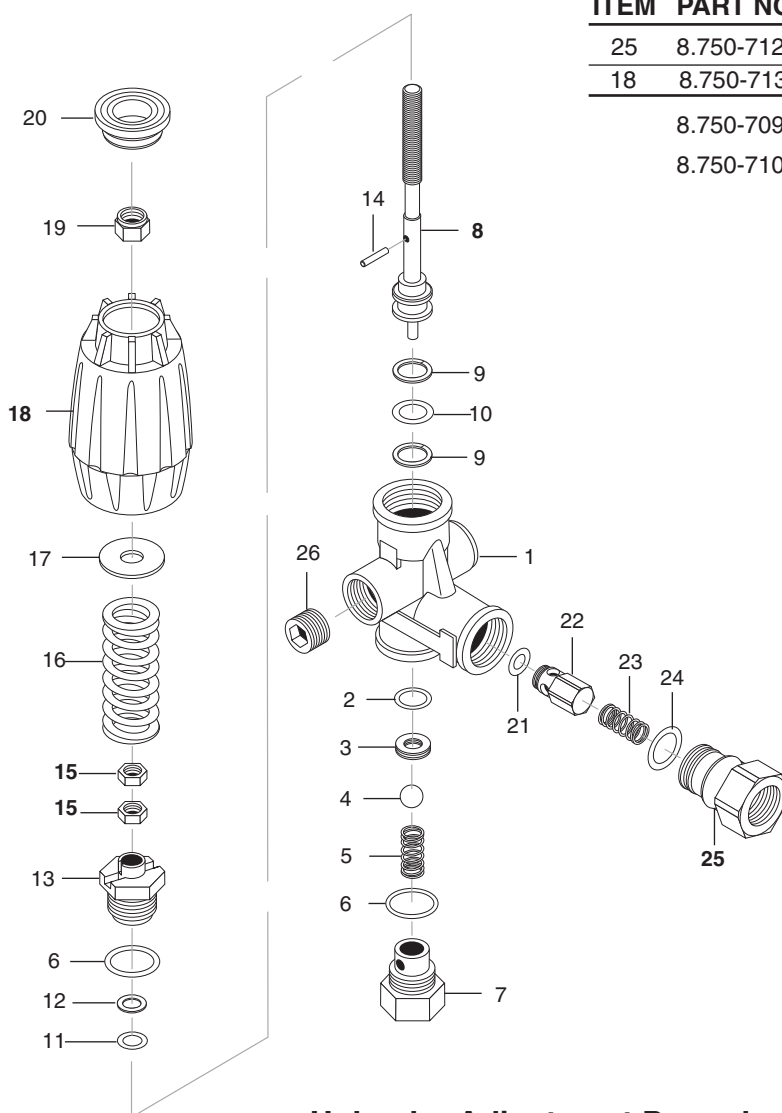
EXAMPLE:

120v x 10 = 1200

APPROXIMATE POWER Requirements for Equipment			
EQUIPMENT		WATTAGE REQUIREMENTS	
		STARTING	RUNNING
Battery Charger, 10 AMPS		-	200
Compressor (see motor charts)	3/4 HP	1900	850
	1 HP	2500	1100
	2 HP	3600	1800
	3 HP	4800	2400
Drill	1/4"	400	300
	3/8"	650	475
	1/2"	900	750
	1"	1250	1000
Welder 100 Amps DC		-	3600
Floodlight		-	1000
Grain Cleaner	1/4 HP	1000	650
Grain Elevator	3/4 HP	3000	1400
Grinders (by motor size)			
Heater Radiant Portable		-	1300
Heater Portable Liquid Fuel	50,000 BTU	675	225
	100,000 BTU	1260	420
	150,000 BTU	1875	625
Impact Wrench	1/2"	750	600
	3/4"	900	750
	1"	1400	1200
Milk Cooler		1800	1100
Mixer, 3-1/2 Cubic Feet		2300	1000
Motors			
Belt Sander		2600	1200
Disk Sander		2600	1200
Orbital Sander		2600	1200
Chain Saw		3400	1200
6" Circular Saw		2200	950
7-1/4" Circular Saw		2600	1200
8-1/2" Circular Saw		3000	1500
10" Circular Saw		3900	2000
Jig Saw		400	300
Cut-off Saw		3500	2500
Screwdriver		800	550
Soldering Iron/Gun		-	150
Sump Pump		1300	400
Water Pump Submersible	3,000 GPH	1750	500
	5,000 GPH	2500	650
	10,000 GPH	3750	1000
	15,000 GPH	5000	1500
Water Pump Non-Submersible	3000 GPH	2250	600
	5,000 GPH	2850	750
	10,000 GPG	4100	1100
	15,000 GPH	5250	1600

VRT3 UNLOADER EXPLODED VIEW AND PARTS LIST

8.750-297.0, 8 GPM, 2320 PSI
 8.750-298.0, 8 GPM, 3630 PSI
 8.750-299.0, 8 GPM, 4500 PSI



ITEM	PART NO.	DESCRIPTION	QTY
25	8.750-712.0	Outlet Fitting	1
18	8.750-713.0	Knob, Unloader	1
	8.750-709.0	Repair Kit, VRT3, 2320/3630 PSI	
	8.750-710.0	Repair Kit, VRT3, 4500 PSI	
		(Kit Items: 1, 4, 8-12, 16, 21-22)	

Unloader Adjustment Procedures

1. Remove lock nut (Item 19).
2. Remove adjustment knob (Item 18).
3. Loosen the two (2) nuts (Item 15), move them upward on stem (Item 8) until you see 4 or more threads below the nut.
4. Re-attach adjusting knob (Item 18).
5. Start machine. Open the trigger of the spray gun. Increase pressure by turning adjustment knob (Item 18) clockwise until pressure is at the desired operating pressure.
6. Remove the adjustment knob (Item 18), tighten the lower nut (Item 15) tightly against the upper nut (Item 15). Re-attach adjustment knob (Item 18) and screw down until contact is made with the nuts (Items 15). Screw down lock nut (Item 19) onto the stem (Item 8) until the threads cut into the nylon insert of the lock nut (Item 19).

*If adjustment knob (Item 18) **DOES NOT** make contact with upper nut (Items 15), remove adjusting knob (Item 18), re-adjust (raise) nuts (Items 15) on stem (Item 8) and re-attach adjustment knob (Item 18), then repeat step #6.

If adjustment knob (Item 18) **DOES make contact with upper nut; release the trigger of the spray gun and watch the pressure gauge for the pressure increase ("spike"). This "spike" **SHOULD NOT** exceed 500 psi above the operating pressure. If "spike" pressure exceeds the 500 psi limit, remove the adjusting knob (Item 18) and re-adjust (lower) the nuts (Items 15) on the stem (Item 8). Re-attach the adjusting knob (Item 18), then repeat step #6.



LANDA LIMITED NEW PRODUCT WARRANTY PRESSURE WASHERS WHAT THIS WARRANTY COVERS

All LANDA pressure washers are warranted by LANDA to the original purchaser to be free from defects in materials and workmanship under normal use, for the periods specified below. This Limited Warranty is subject to the exclusions shown below, is calculated from the date of the original purchase, and applies to the original components only. Any parts replaced under this warranty will assume the remainder of the part's warranty period.

SEVEN YEAR PARTS AND ONE YEAR LABOR WARRANTY:

Components manufactured by LANDA, such as frames, handles, top and bottom wraps, float tanks, fuel tanks, belt guards, and internal components on the oil-end of Landa manufactured pumps. General, AR, Liberty, Comet and swash and wobble plate pumps have a one year warranty. Heating coils have a five year warranty from date of original machine purchase.

ONE YEAR PARTS AND ONE YEAR LABOR WARRANTY:

All other components, excluding normal wear items as described below, will be warranted for one year on parts and labor. Parts and labor warranty on these parts will be for one year regardless of the duration of the original component manufacturer's part warranty.

WARRANTY PROVIDED BY OTHER MANUFACTURERS:

Motors, generators, and engines, which are warranted by their respective manufacturers, are serviced through these manufacturers' local authorized service centers. LANDA is not authorized and has no responsibility to provide warranty service for such components.

WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover the following items:

1. Normal wear items, such as nozzles, spray guns, discharge hoses, wands, quick couplers, seals, filters, gaskets, O-rings, packings, pistons, pump valve assemblies, strainers, belts, brushes, rupture disks, fuses, pump protectors.
2. Damage or malfunctions resulting from accidents, abuse, modifications, alterations, incorrect installation, improper servicing, failure to follow manufacturer's maintenance instructions, or use of the equipment beyond its stated usage specifications as contained in the operator's manual.
3. Damage due to freezing, chemical deterioration, scale build up, rust, corrosion, or thermal expansion.
4. Damage to components from fluctuations in electrical or water supply.
5. Normal maintenance service, including adjustments, fuel system cleaning, and clearing of obstructions.
6. Transportation to service center, field labor charges, or freight damage.

WHAT YOU MUST DO TO OBTAIN WARRANTY SERVICE

While not required for warranty service, we request that you register your LANDA pressure washer by returning the completed registration card. In order to obtain warranty service on items warranted by LANDA, you must return the product to your Authorized LANDA Dealer, freight prepaid, with proof of purchase, within the applicable warranty period. If the product is permanently installed, you must notify your Authorized LANDA Dealer of the defect. Your Authorized LANDA Dealer will file a claim with Landa, who must subsequently verify the defect. In most cases, the part must be returned to LANDA freight prepaid with the claim. For warranty service on components warranted by other manufacturer's, your Authorized LANDA Dealer can help you obtain warranty service through these manufacturers' local authorized service centers.

LIMITATION OF LIABILITY

LANDA'S liability for special, incidental, or consequential damages is expressly disclaimed. In no event shall LANDA'S liability exceed the purchase price of the product in question. LANDA makes every effort to ensure that all illustrations and specifications are correct, however, these do not imply a warranty that the product is merchantable or fit for a particular purpose, or that the product will actually conform to the illustrations and specifications. Our obligation under this warranty is expressly limited at our option to the replacement or repair at a service facility or factory designated by us, of such part or parts as inspection shall disclose to have been defective. **THE WARRANTY CONTAINED HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY.** LANDA does not authorize any other party, including authorized LANDA Dealers, to make any representation or promise on behalf of LANDA, or to modify the terms, conditions, or limitations in any way. It is the buyer's responsibility to ensure that the installation and use of LANDA products conforms to local codes. While LANDA attempts to assure that its products meet national codes, it cannot be responsible for how the customer chooses to use or install the product. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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